User's Guide

FlexWATCH® 1120

Seyeon Technology Co., Ltd
www.flexwatch.com

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Quick Installation

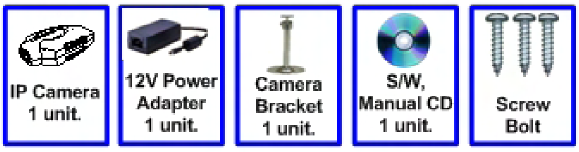
Before You Begin

You must have the following :

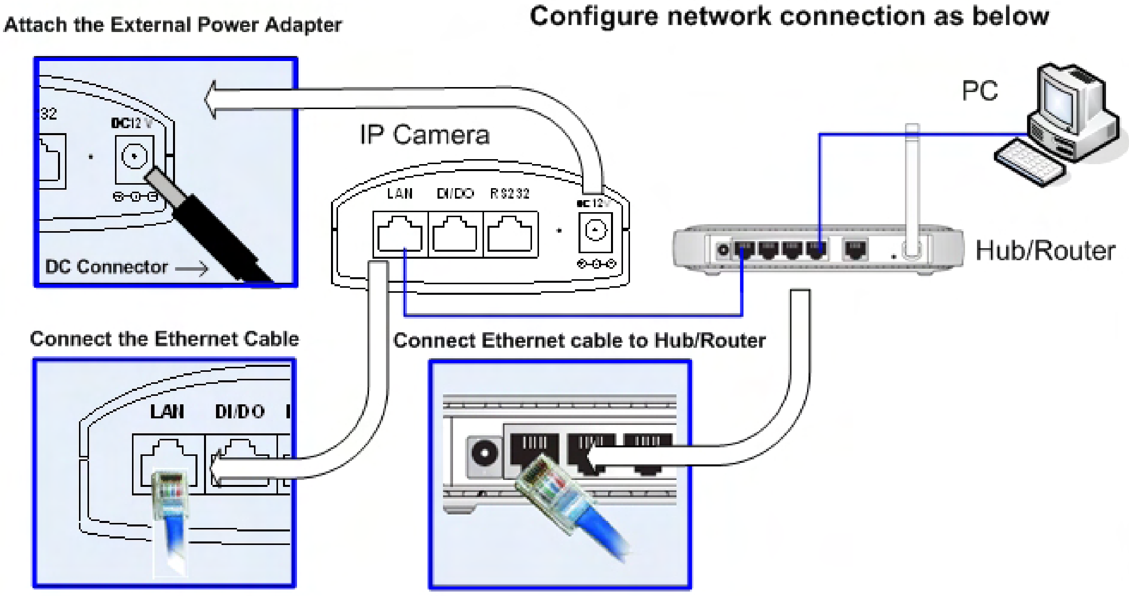
Web Browser : Internet Explorer 6.0 or later
Wired Hub / Switch / Router
CD-ROM Drive
O/S : MS Windows XP, 2000, ME, 98 SE
CPU : Pentium 4 1.4 GHz or AMD Athlon 1GHz
(Recommend Pentium 4 2.0 GHz or above)
Memory : DDR SDRAM 256MB or higher
Network : 10/100 Mbps network card

Check Your Package

Please check and make sure all of following items are included in your package without any items missing.

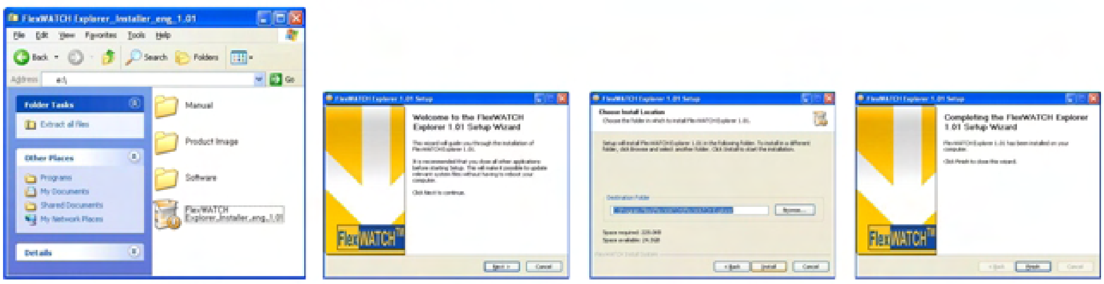


1 Hardware Installation and Network Configuration



2 FW Explorer Setup

Insert the S/W, Manual CD into your CD-ROM Drive



Run FlexWATCH Explorer_Installer — Click Next — Click Install — Click Finish

③ Setup the camera (Local Access Only)

1. Run FlexWATCH Explorer on desktop.

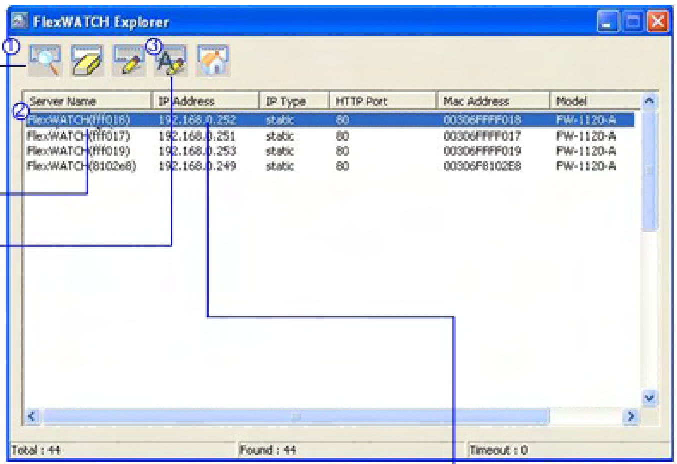


2. Click ①Search FlexWATCH

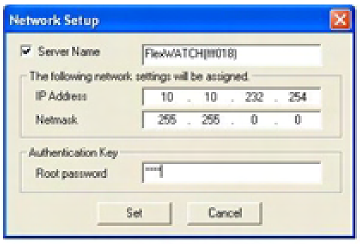
Please wait for a few seconds until searching is complete. When completed Click "OK"

Select ②camera for setup

Click ③Setup FlexWATCH IP(Auto Recommendation)



3. Insert Password root and click Set



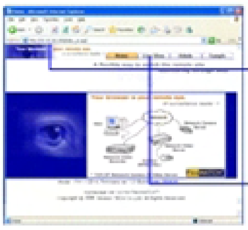
4. Click Yes when the message displays "Are you sure the network information is changed?"

5. Please wait for a few seconds until searching is complete. When completed Click OK

6. Please make note of this numbers. This numbers are IP address to access network camera. (Example : 10.10.232.254)

Tips: If you want to set up internet access to the camera, please refer to the manual on the S/W, Manual CD.

④ Access to the IP Camera

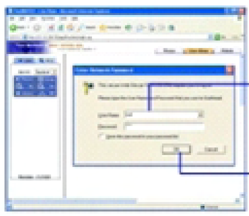




Insert IP address on web browser (Example : 10.10.232.254)

Press Enter key or Click Go

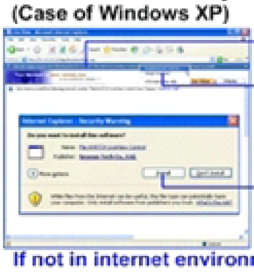
Click Live View



Insert "root" As user name and password

Click OK

In internet environment, ActiveX control will be installed automatically as following steps. (Case of Windows XP)

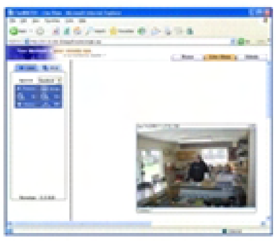


Click Here

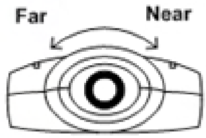
Click Here to install ActiveX control

Click Install

After installation of ActiveX control You can see live view.



Turn Lens to control Focus



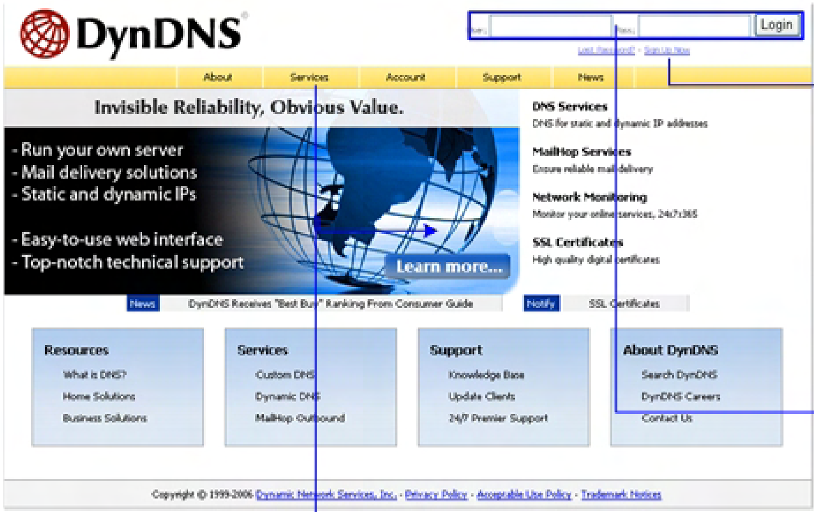
If not in internet environment, please install activeX control file :"Software\LiveView\LiveView.exe" from S/W, Manual CD.

① Internet Access (DDNS Setup)

Signup your DDNS account. (Ex. DynDNS)

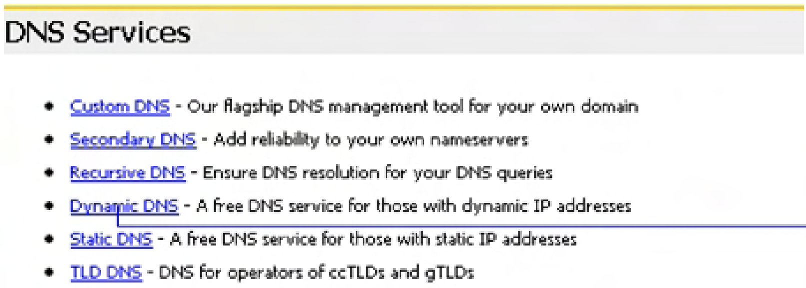
- Access DDNS Service site which IP Sharer support.
- Signup DDNS account and running ID, Password and Hostname.

"Http://www.dyndns.com" is suggested as DDNS service provider.
Reason is, supports most of IP router. .

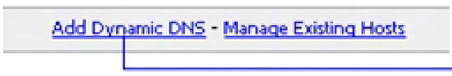


Http://www.dyndns.com

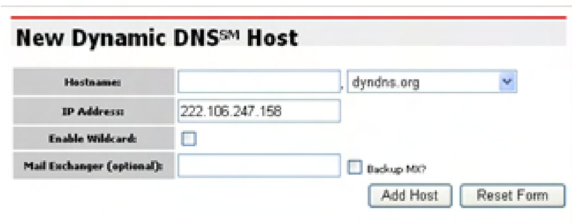
1. Click <u>SignUp Now</u> To SignUp DDNS.
2. Create Account (Input User name, E-mail address, Password)
3. You will receive an e-mail containing instructions to activate your account. Follow for instructions.
4. Login DynDNS with user name and password.
5. Click <u>Service</u> to register service.



6. Click <u>Dynamic DNS</u> to register DDNS.



7. Click Add Dynamic DNS to register Dynamic DNS.



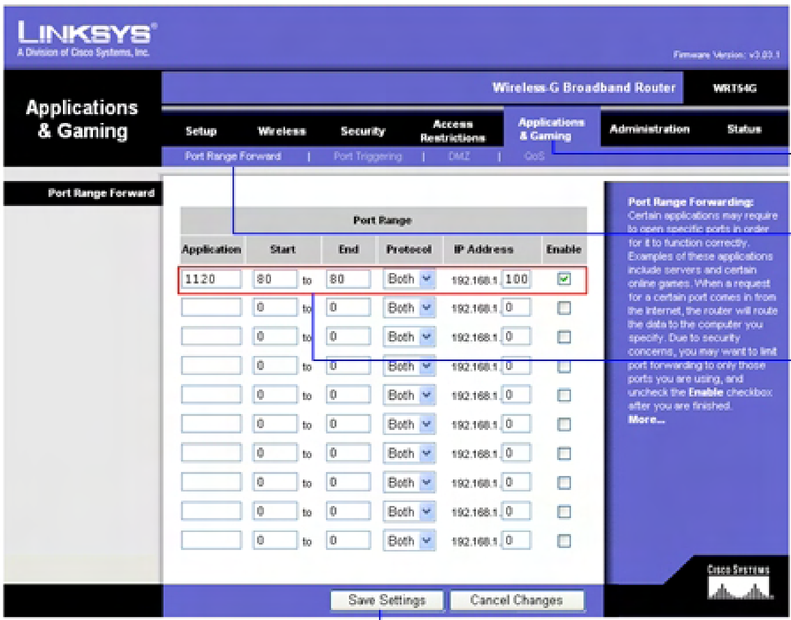
8. Input Hostname and Click "Add Host".

Hostname will be used for internet access.

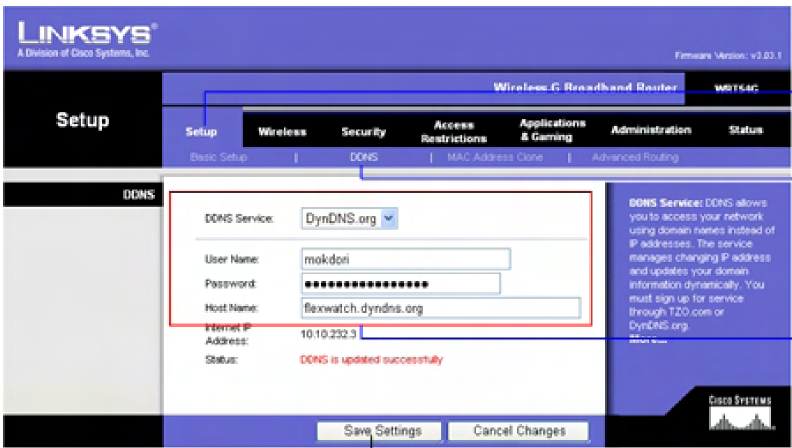
② Internet Access (IP Sharer Setup)

(1) LINKSYS

Access Linksys IP sharer and goto Port Range Forward
(Default IP address : 192.168.1.1)



1. Select "Applications & Gaming"
2. Select "Port Range Forward"
3. Setup Port forward with Html port(80) to open. (Input IP address as IP address of FW-1120)
4. Click "Save Settings" to save configuration.



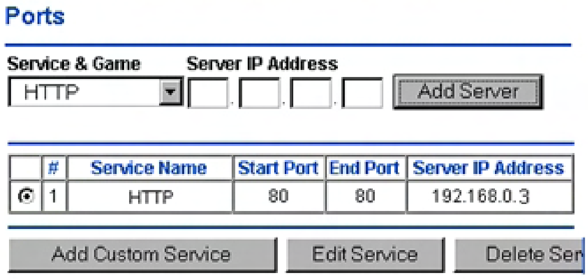
5. Click "Setup"
6. Click "DDNS"
7. Select DDNS service and Input User Name, Password and Host Name.
8. Click "Save Settings" to save configuration.

Note: For more information about setup IP sharer, please contact manufacturer of IP sharer.

2 Internet Access (IP Sharer Setup)

(2) Netgear

1. Type the router's address in Internet browser's address bar.
   (By default the router's address is 192.168.0.1).
   The Setup Wizard appears.
2. Enter the router's username and password
3. Under Advanced, click Port Forwarding on the left menu bar



A Port Forwarding Screen (Varies Slightly by Router)

4. Setup Port forward with Html port(80) to open.
   (Input IP address of FW-1120)

   From the Service & Game (or Service Name) drag down, select the HTTP service.
   Enter the IP address of your FW-1120 in the "Server IP Address" box.
   Click "Add Server".
   Click Logout to exit from router settings.

5. Setup Dynamic DNS configuration
   From the Main Menu of the browser interface, under Advanced, click on Dynamic DNS.
   To configure Dynamic DNS:
   A. Register an account with one of the dynamic DNS service providers, whose names appear in the 'Select Service Provider' box. For example, for dyndns.org, go to www.dyndns.org.
   B. Select the Use a Dynamic DNS service check box.
   C. Select the name of your dynamic DNS Service Provider.
   D. Type the Host Name (or domain name), your dynamic DNS service provider gave you.
   E. Type the User Name for your dynamic DNS account.
   F. Type the Password (or key) for your dynamic DNS account.
   G. If your dynamic DNS provider allows use of wildcards in resolving your URL, you may select the Use wildcards check box to activate this feature.
      For example, the wildcard feature will cause *.yourhost.dyndns.org to be aliased to the same IP address as yourhost.dyndns.org
   H. Click Apply to save your configuration.

   Note: If your ISP assigns a private WAN IP address (such as 192.168.x.x or 10.x.x.x), the dynamic DNS service will not work because private addresses will not be routed on the Internet.

Note: For more information about setup IP sharer, please contact manufacturer of IP sharer.

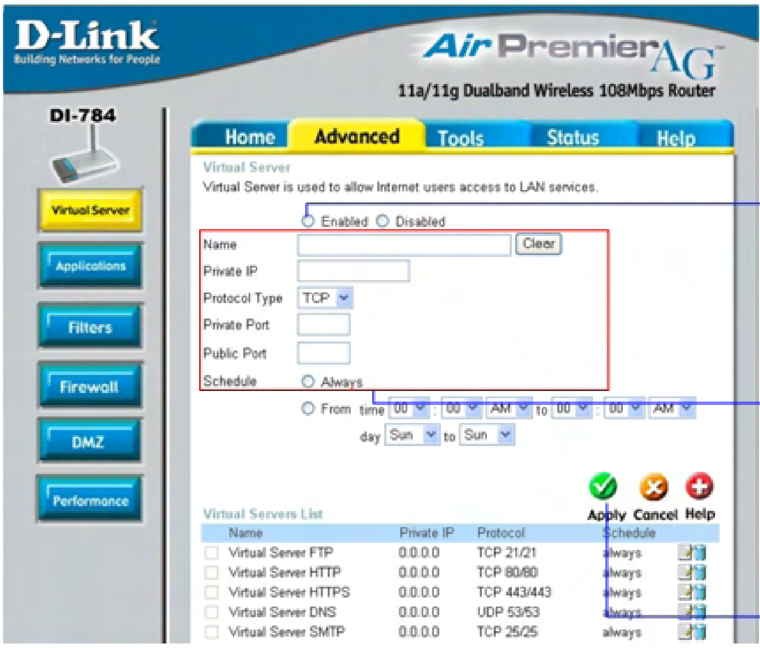
② Internet Access (IP Sharer Setup)

(3) D-Link

1. Type the router's address in Internet browser's address bar.
   (By default the router's address is 192.168.0.1).
   The Setup Wizard appears.

2. Enter the router's username and password

3. Under Advanced, click Virtual Server on the left menu bar



A. Select "Enable"

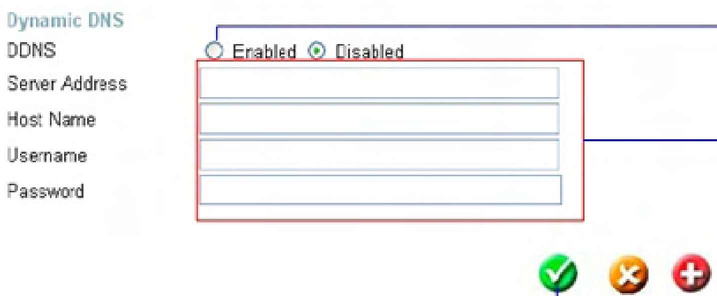
B. Input Name, Private IP (IP address of FW-1120)

C. Select Protocol Type as HTTP and input private port and public port as html port(80)

D. select "Always" as schedule

E. Click "Apply" to save configuration

4. Setup Dynamic DNS configuration
   From the Main Menu of the browser interface, under Tools, click "Misc" on the left menu.



A. Select "Enable"

B. Input Server address (IP address of FW-1120)

C. Input Host Name

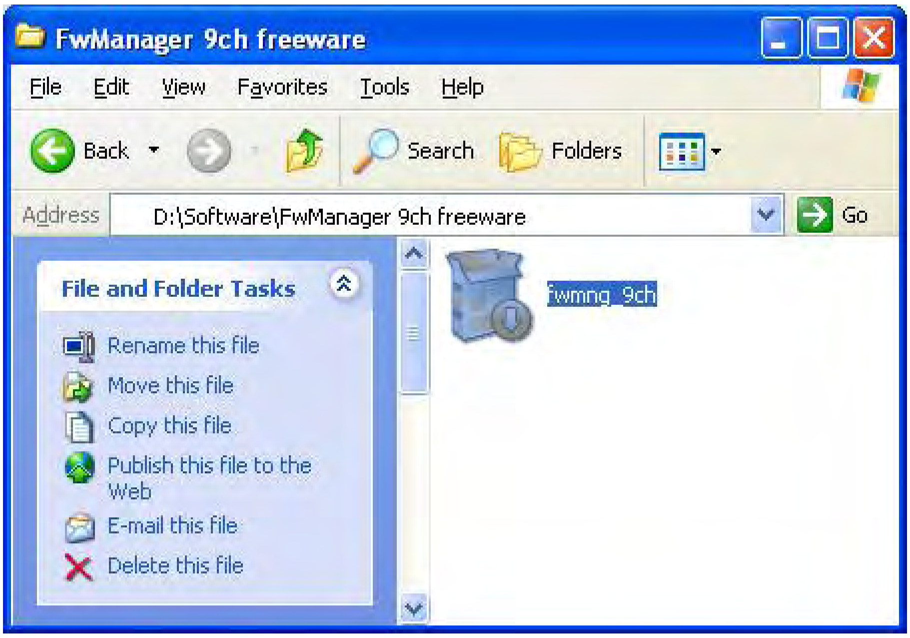
D. Input Username and Password.

E. Click "Apply" to save configuration

Note: For more information about setup IP sharer, please contact manufacturer of IP sharer.

Installation of FwManager

1. Insert the FwManager CD



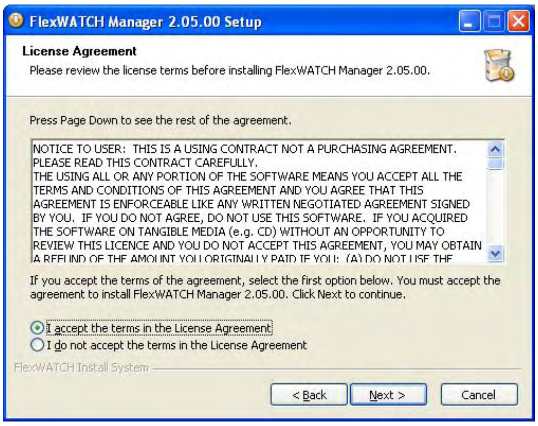
Find and run "fwmng_9ch.exe" file

Location : Software > FwManager 9ch freeware

2. Installation wizard will start to install the program. Click [Next] button.

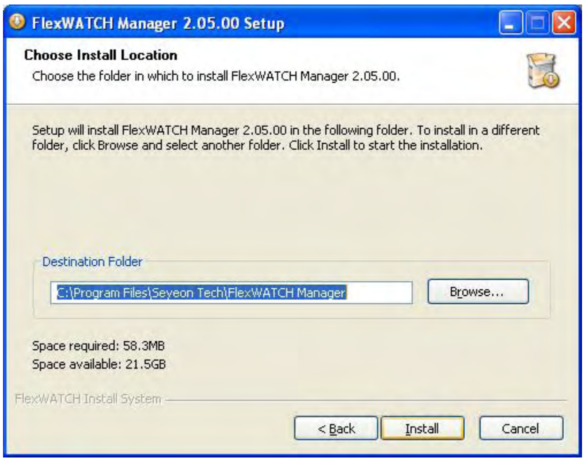


3. Select "I accept the terms in the License Agreement" and click [Next] button.

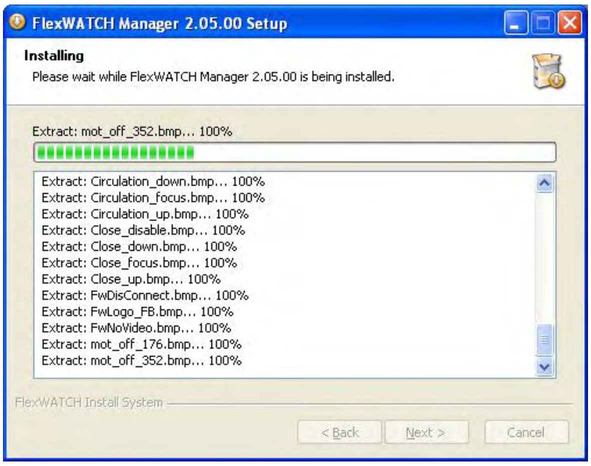


4. Select the Folder in which you would like to install the FwManager. Default folder is 'C:\Program Files\Seyeon Tech\FlexWATCH Manager'. You can browse your folder and install the program in another folder as well.

Click [Install] button.



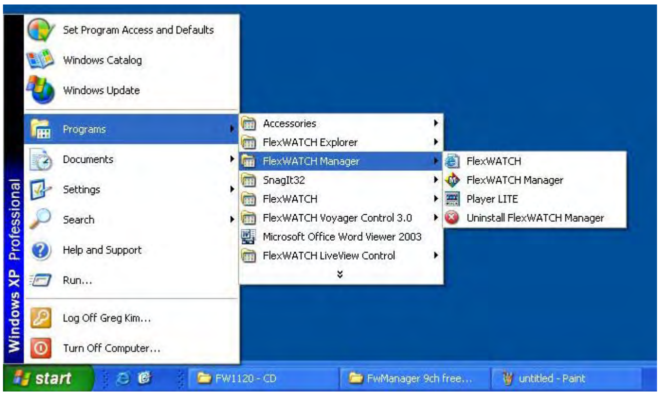
5. Please wait while FlexWATCH Manager is being installed.



6. Now, FlexWATCH Manager Installation is finished successfully.
   Click [Finish] button to close install wizard.



7. Run FlexWATCH Manager to use.
   Location : Programs > FlexWATCH Manager > FlexWATCH Manager



NOTICE!

If you need more information about using FW Manager 2.05, please refer user's guide

Part I

Product Overview

1. Overview of FlexWATCH® Server

What is FlexWATCH®?

The FlexWATCH® server is the Network camera Server, which transmits digital images captured by Analog CCD/CMOS cameras over the Internet. So users can view real-time live images over the Internet at anytime and anywhere using the standard web browser such as MS Internet Explorer or Netscape Communicator. There is no need for other specific software to view real-time live images over the Internet. The FlexWATCH® server is state-of-the art device and leads new generation of monitoring and security solution.

Introduction to FW-1120

FW-1120 is the stand alone camera server, which transmits 1 channel video input from built-in CMOS camera through IP(Internet Protocol) Network. FW-1120 can transmit the video data with maximum 30 fps(NTSC) through LAN, leased line, DSL and Cable modem. So user can view real-time live images over the internet at anytime and anywhere using the Web Browser (MS Internet Explorer or Netscape Communicator) where network is connected to FW-1120. FW-1120 supports three kinds of image resolution (640x480/ 320x240/160x120) and six kinds of image quality.



FW-1120

1.1. Key Features

- Stand-alone camera with built-in web server
- 10M/100M auto-sensing Ethernet
- Camera administration and control by web browser
- Transmission speed up to 30 fps through TCP/IP network
  (50Hz power frequency area: 25fps)
- Dynamic IP network support
- Sensor Input, Digital Output supporting
- Multiple user level for security protection
- Image transmission through E-Mail

1.2. Product Specification

Model		FlexWATCH®-1120
Hardware	CPU	32bit Embedded CPU
	OS	Embedded Linux
	Flash Memory	4Mbyte
	SDRAM	32Mbyte
Image Compression	Algorithm	Standard H/W M-JPEG, JPEG
	Level (6 Level)	Low compression, highest, high, normal, low, lowest
Performance	Compression / Transmission Speed	Maximum 30fps(Power Frequency: 60Hz)/ 25fps(Power Frequency: 25Hz)
Resolution		3 Level [640x480,320x240,160x120]
Camera	Image sensor	VGA Class CMOS Sensor
	Light Sensitivity	Min 10 Lux
Network	Protocol	HTTP, TCP/IP, ARP, Telnet, Ftp, RARP, PPP, SMTP, DHCP, etc
	LAN Interface(RJ-45)	Ethernet 10/100 Base-T, PPPoE/DHCP
Serial Port	Com port(RS-232)	Console
Alarm Input/Output	DI/DO	Sensor 1 Input(NC/NO selectable) / Alarm 1 Output(Relay)
Monitoring	Web Browser	MS Windows Internet Explorer 6.0 or Higher
		Web Browser support SUN JRE 1.4 or Higher(restricted
	Recording S/W (Voyager s/w)	Monitoring/Control/Recording/Search with Voyager S/W(Freeware)
		Alarm warning/DO control function
Remote administration	System Upgrade	Upgrade Software(firmware/Web) by remote access
Optional Function	Image transmission	Image Capture and E-mail transmission by Sensor/Motion Detection
	Dynamic IP Support	Dynamic IP Support with x-DSL/Cable modem(www.aoip.co.kr)
	Motion Detection	Built-in Hardware Motion Detection
Security function		Password access function by Administrator
		ID/Password access by multiple user
Operating Temperature/Humidity		5℃ ~ 50℃(40° ~ 125°F)/20%~80% RH
Power supply Usage		SMPS DC 12V/1.5A[AC 110/220V 50/60Hz]
Measurement (WxDxH)	Size(mm)	91(W)x140(D)x40(H)mm
	Weight(kg)	Approximately 170 g

1.3. FW-1120 Packing List

Please check and make sure all of the following items are included in your FW-1120 package without any missing items.

FlexWATCH® 1120	1 unit	
Power Supply (Power Cable & SMPS DC12V Adapter)	1 unit	
Manual, Software CD	1 unit	
Camera Bracket	1 unit	
Screw Bolt	3 EA	

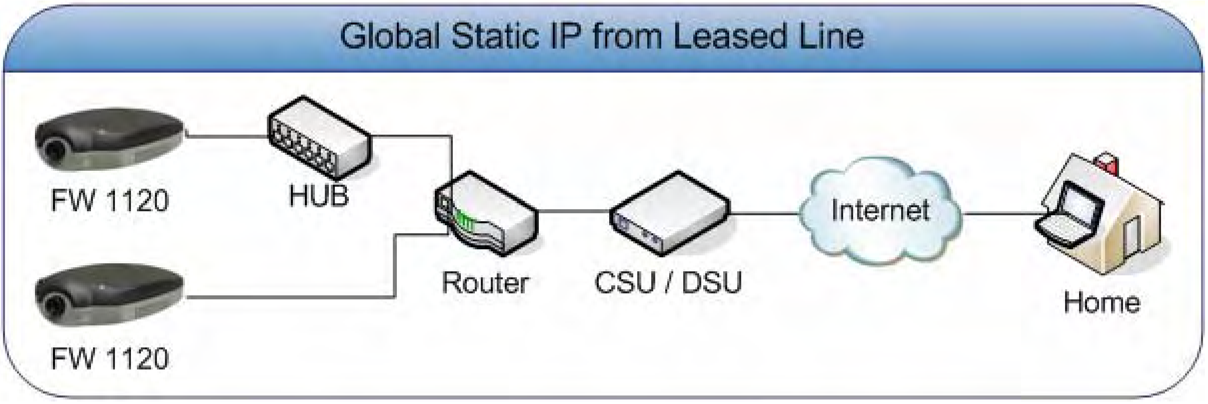
If there are any missing items, please refer to your local distributor.

1.4. Basic Network Connection Diagram

FlexWATCH® server provides flexible connectivity with any type of networks available around you such as Leased line, Cable modem, xDSL modem and PSTN modem. Thus it can be installed either LAN or WAN environment as long as there is network available not only public network but also private network. There are three connection methods to configure network for using FlexWATCH®.

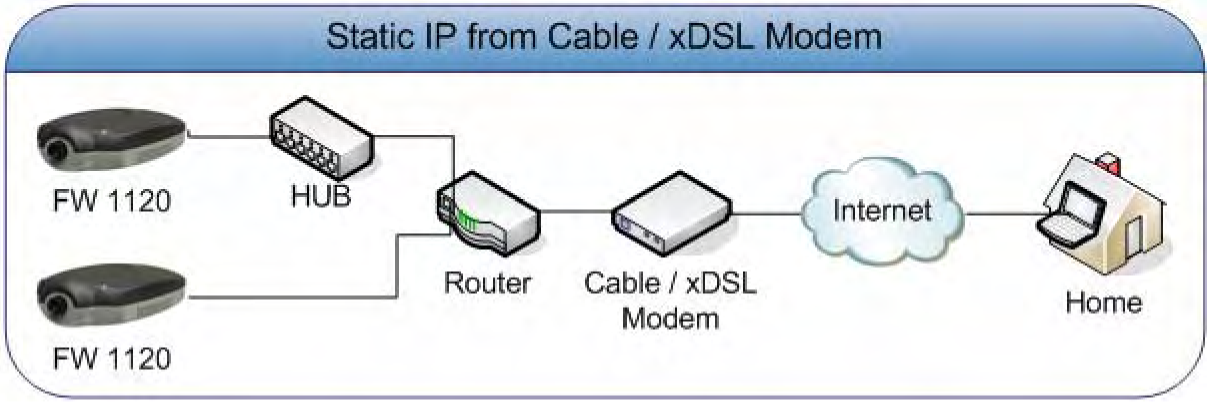
1.4.1. Leased Line connection

Public static IP is using leased line connection and assigns to FlexWATCH® and receives live view through local access and Internet access.



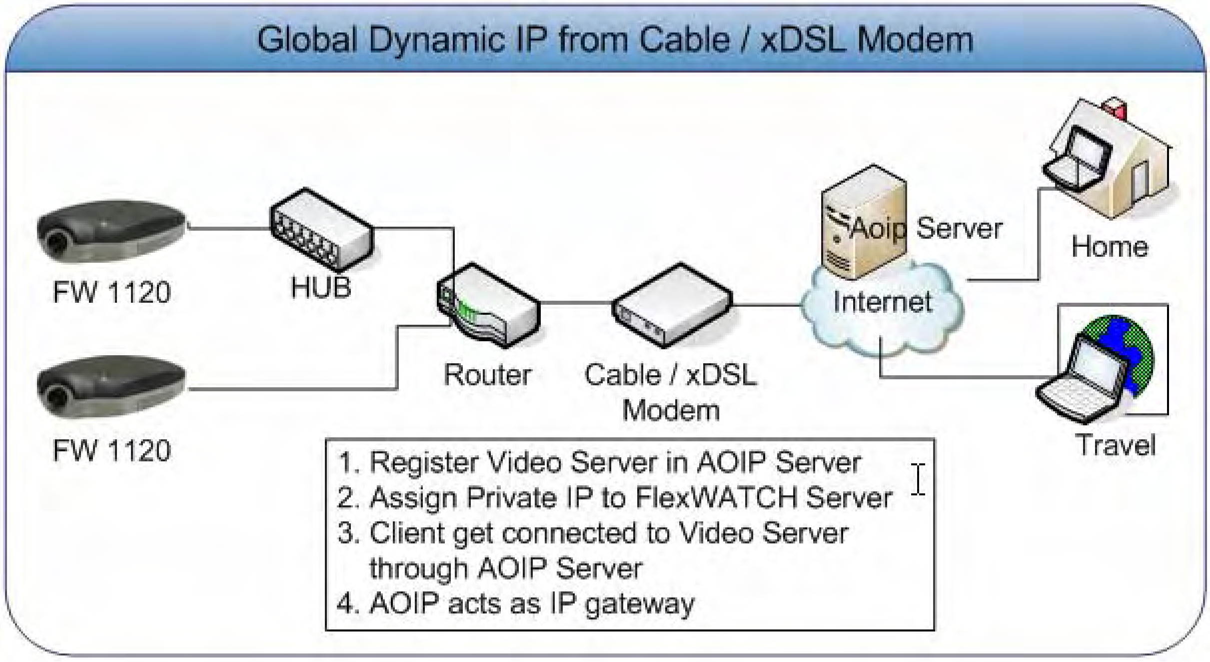
1.4.2. Static IP address from Cable modem or xDSL line

FlexWATCH® can be used by static IP through cable modem or xDSL line.



1.4.3. Dynamic IP address from Cable modem or xDSL line

FlexWATCH® can be used by dynamic IP through cable modem or xDSL line. AOIP Server from seyeon tech can be used for supporting Dynamic IP.



1.5. Application

FW-1120 is TCP/IP based remote video surveillance system for trusted and flexible network configuration. FW-1120 is capable of gathering remote video data from wide regions. Image from FW-1120 transfers through IP based network. Users can use functions of video monitoring, recording to client PC, and playback from recorded image. FW-1120 can be also connected with other FlexWATCH products for convenient control, recording, and playback.

Multiple FlexWATCH products can be configured through FlexWATCH Manager for much powerful surveillance system.

FW-1120 can be used as stand-alone or co-work with other FlexWATCH products for adapting various sites.

- Small shop, Franchise shop
- Distributed video recording for local facility
- Remote monitoring for office
- Industrial monitoring for factory, power plant
- Field office monitoring for multiple sites.
- Monitoring for garage, warehouse, gas station.

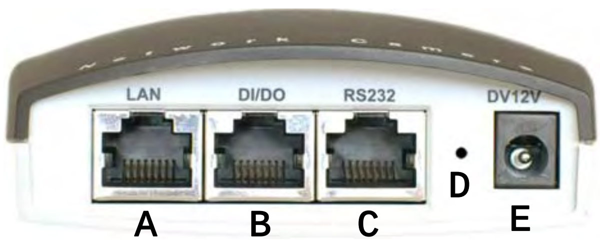
2. Hardware Description

2.1. FW-1120 Front Panel View



A	State LED	Red	Red-light is on when powered on and initializing state
		Orange	Finish initializing and active state
B	LAN LED (Network State LED)	Green	Indicate state that network access is possible
		Orange	LAN is connected normally but network setting is not finished and communication is impossible (lights on when Booting or modifying network configuration.)
		Red	LAN cable is not connected when booting or modifying network configuration.
		Off	LAN cable is not connected.

2.2. FW-1120 Rear Panel View



A	LAN	LAN Port for 10/100M Base T Auto sensing
B	DI/DO	Connect to sensor input and alarm output
C	COM	Console port to device setting (UART-Out, UART-In)
D	Reset Button	Revert to factory default
E	DC12V COM	DC 12V 1.5A [SMPS]

3. FW-1120 installation and basic configuration

3.1. Check points before system installation

- Please read this user's manual carefully before installation.
- Check user network environment (IP Address, Network Mask and default gateway)
- Assign FW-1120 with secure IP address.

3.2. Factory Default

Please refer to the following factory defaults to change settings.

	Factory Default
Admin ID	Root
Admin password	Root
IP address	10.20.30.40
Network mask	255.255.255.0
Gateway	None

☞ *Admin ID and password is case sensitive.*

3.3. FW-1120 Hardware installation

Please follow instruction as below for FW-1120 installation.

A) Locate place to install FW-1120.

B) Connect LAN port of FW-1120 to local area network.

C) Supply power to FW-1120.

Next steps of FW-1120 installation are as below.

First, setup network configuration
(After IP Assignment, run web browser and input IP address)

Second, setup camera setting(Direction, focus, function control with live view)

Third, setup for service (setup and save configuration through admin menu)

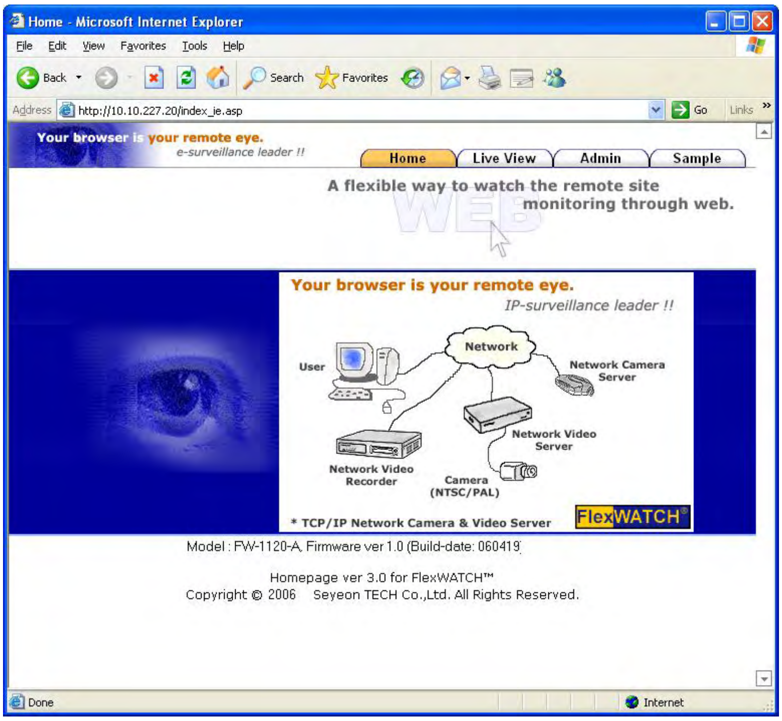
Refer to related chapter for more detailed information about setup. User must setup network configuration first! Due to FW1120 configuration is done through the web.

3.4. Network configuration

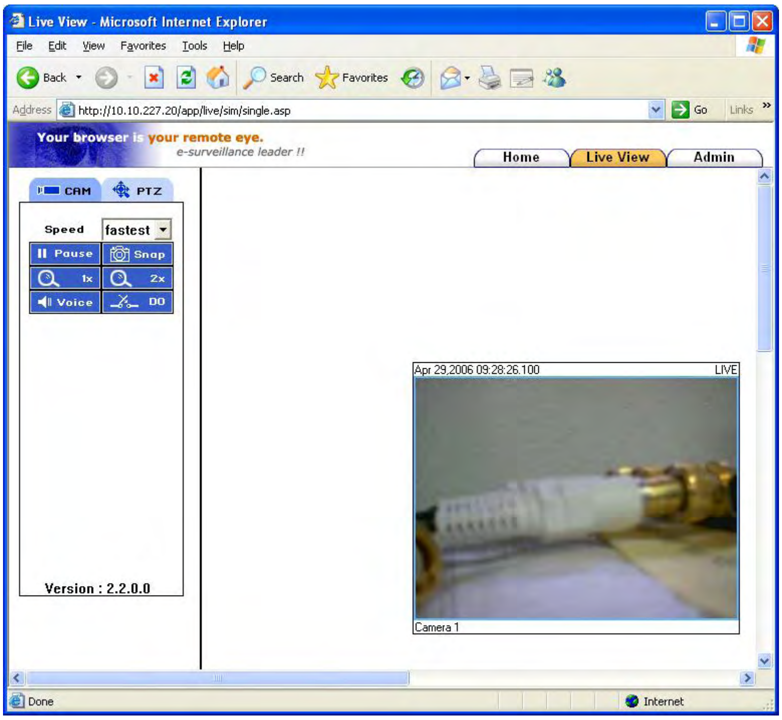
First step of network configuration is assigning IP address to FW1120 with network environment suitable to users. Other configuration should be conducted after first step. There are two methods of IP assignments. First method is by using FlexWATCH Explorer included in the CD. Second method is using **terminal emulation program** (Example: Hyper Terminal in Microsoft Windows)

3.4.1. IP assignment through FlexWATCH Explorer

You can easily setup basic IP assignments with FlexWATCH Explorer. After the assignment, other configuration setup can be done through the web browser. Please refer to FlexWATCH Explorer user's guide for installation of FlexWATCH Explorer (**FlexWATCH Explorer_Installer_eng_1.01.exe in CD**)



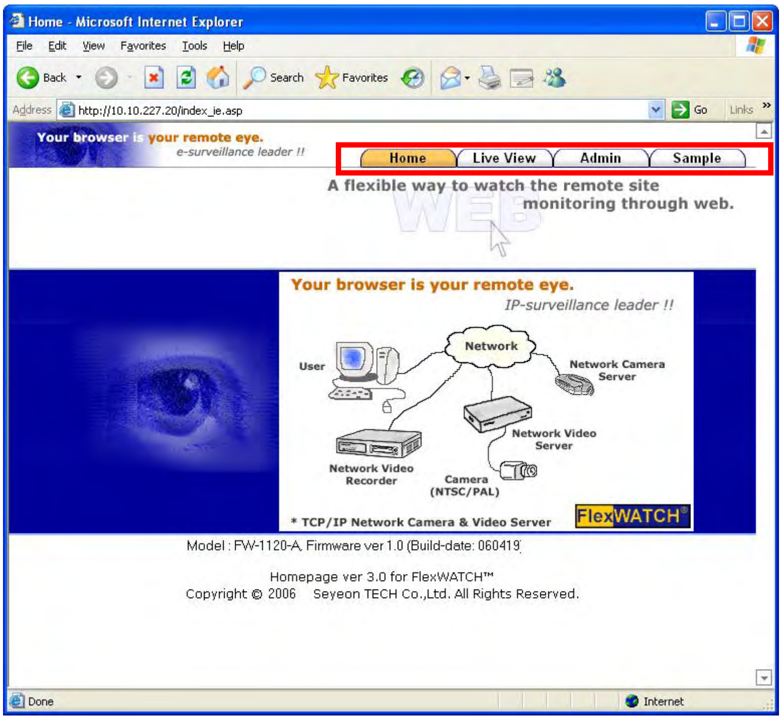
Select "Live View" menu to see live display of FW-1120.



4. FW-1120 Operation

4.1. "Home" screen

After network configuration from previous steps, users can access to FW-1120 through web browser on PC.



Move the cursor to 4 menu tabs on screen to show each simple description image on center area.

4.2. "Live View" menu

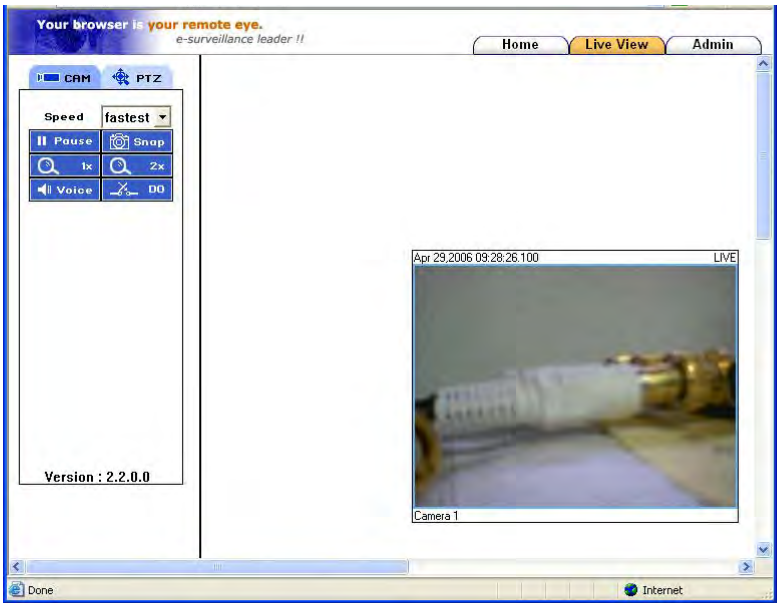
4.2.1. Live View

A) After installation, access to FW-1120 and click Live View, on the top of the right side security warning message window will pop-up as below.

Click 'Yes' then live view will be displayed. (Installation of ActiveX Control is needed to show live view when using windows XP)



(Windows XP Security Warning screen)



4.2.2. Camera Control Page Guide

Menu Description	
Image	Description
CAM	Camera Control menu
Speed fastest	Control Frame speed.
Pause Play	Click to toggle pause or play current camera screen.
Snap	You can make a snapshot of video while viewing the live video as jpg file format named "Year,Month,Day_Hour,Min,Sec_cam1.jpg"
Voice	Enable two way voice communication with VoiceKit (FW-V10s)
DO	Control DO for signal from DI.

4.2.3. PTZ Control button description

PTZ	PTZ Control menu button FW-1120 has no function to control PTZ device directly. Control menu will be disabled.

Live Viewer program is ActiveX control for all FlexWATCH products. FW-1120 does not support PTZ control; PTZ control menu is shown but disabled.

4.3. "Admin" menu

On this menu, as an administrator, you can setup and save all configurations of FW-1120. To access admin menu, admin user ID and Password is required.
Factory default value of admin ID and Password is "root" and "root". You can change admin password after login to admin Menu.
Part II of this manual describes the detail information's of admin menu.

Part II

Admin Menu of Web Page

5. Admin Menu

You can setup and save all configurations of FlexWATCH® Server as an administrator. For login to admin menu, admin ID and Password is required.
Factory default value of admin ID and Password is "root" and "root". You can change admin password after login to admin Menu.

5.1. Accessing Admin Menu

A) Access FlexWATCH® Server through web browser, you may see screen as below.

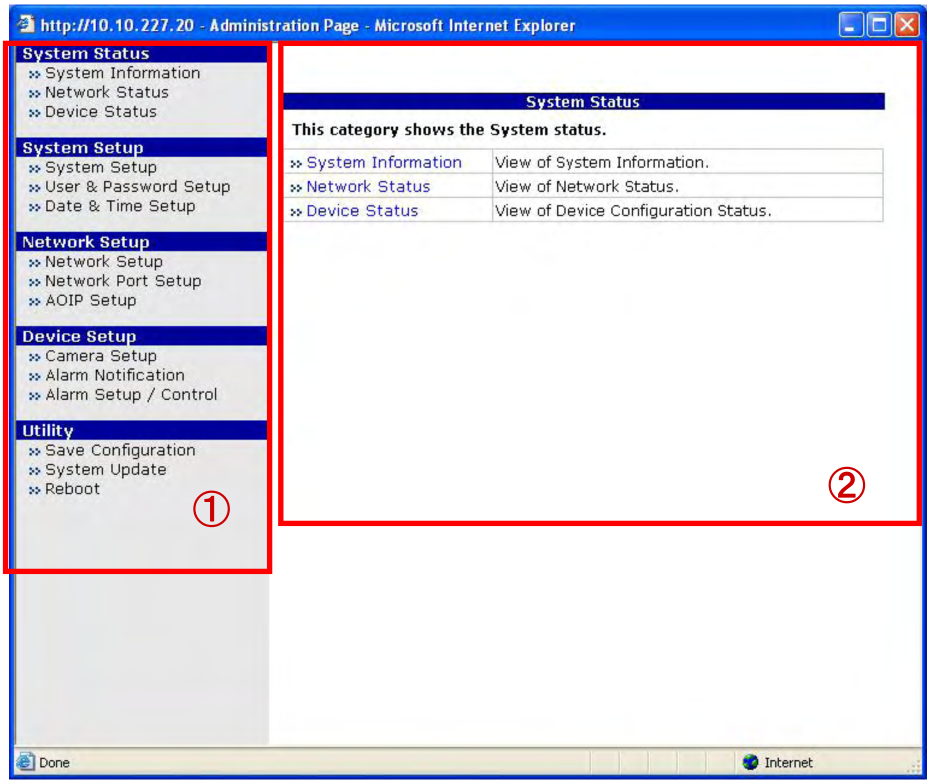


B) Click admin menu, then admin login window will be shown as below.





C) Input ID:root and Password (default: root) and press Enter key to access admin menu.



D) Menu Screen

① :List of admin menu is shown. FlexWATCH® Server has menus for System Status, System Setup, Network Setup, Device Setup, and Utility. Each menus have several sub menus.

② : Click each blue menu list (System Status, System Setup, Network Setup, Device Setup, Utility) to show small descriptions for menus and sub menus.

5.2. Admin Menu Structure

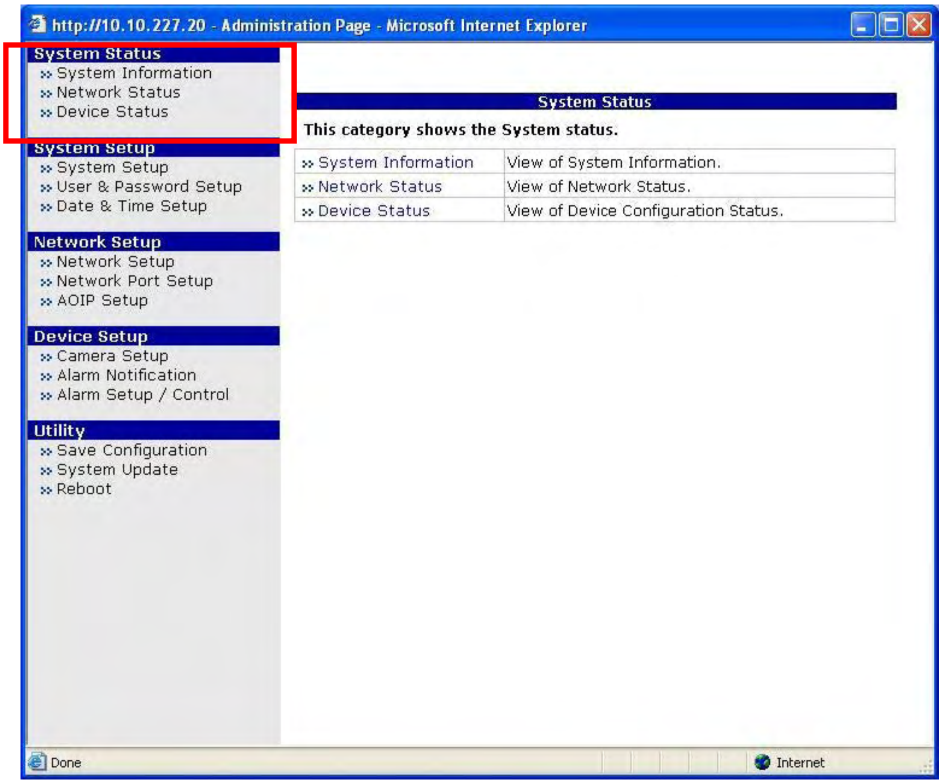
Admin Menu is structured as below. Each sub menus will be explained on next chapter.

Menu	Sub Menu
System Status	System Information
	Network Status
	Device Status
System Setup	System Setup
	User & Password Setup

	Date & Time Setup
Network Setup	Network Setup
	Network Port Setup
	AOIP Setup
Device Setup	Camera Setup
	Alarm Notification
	Alarm Setup / Control
Utility	Save Configuration
	System Update
	Reboot

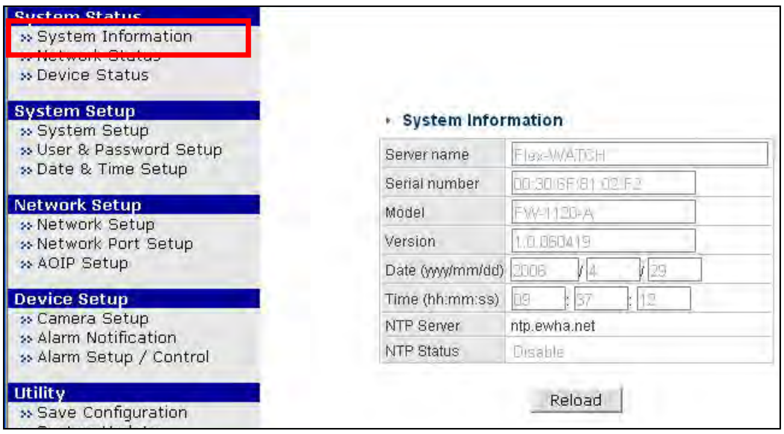
6. System Status Menu

System status menu shows the system status of FW-1120. This menu shows system information, time / date, network status, configuration status of video display, status of DI/DO and etc. Modification of configuration is not possible in this menu.



6.1. System Information

System Information shows system information of FlexWATCH® Server name, serial number, model, version, date/time and NTP server setting.

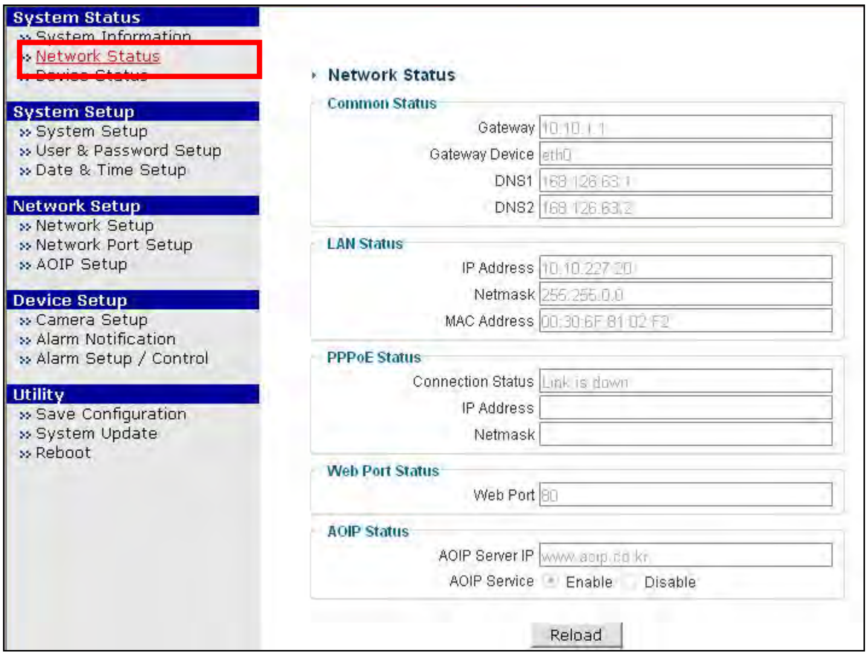


Menu configuration

Server Name	Name of FW-1120
Serial Number	Serial Number of FW-1120 (Defined as MAC Address)
Model	Model name of FW-1120
Version	Product version of FW-1120
Date	Date of FW-1120 (local time)
Time	Time of FW-1120 (local time)
NTP Server	Address of NTP server, (Using NTP for time sync)
NTP Status	After booting, FW-1120 sync time from NTP server on every 24 hours

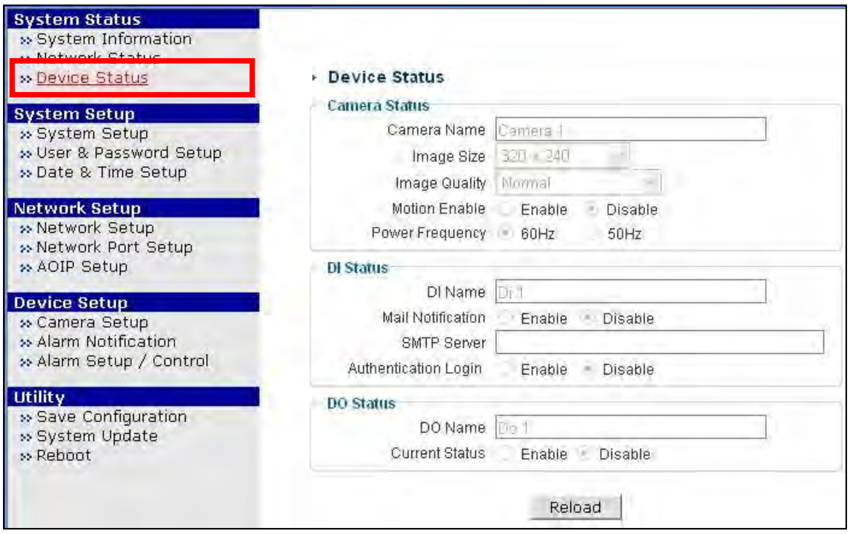
6.2. Network Status

Network Status menu shows status of network, HTTP port and AOIP configuration.



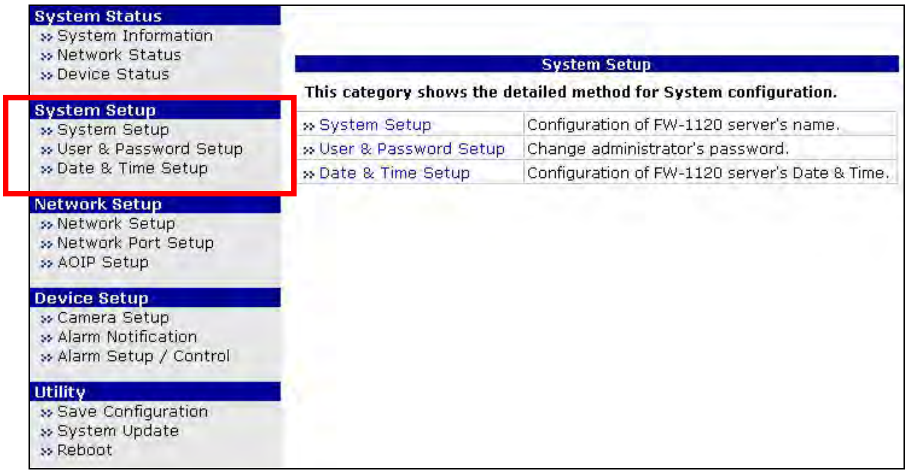
6.3. Device Status

Device status menu shows status of camera and configurations of DI/DO.

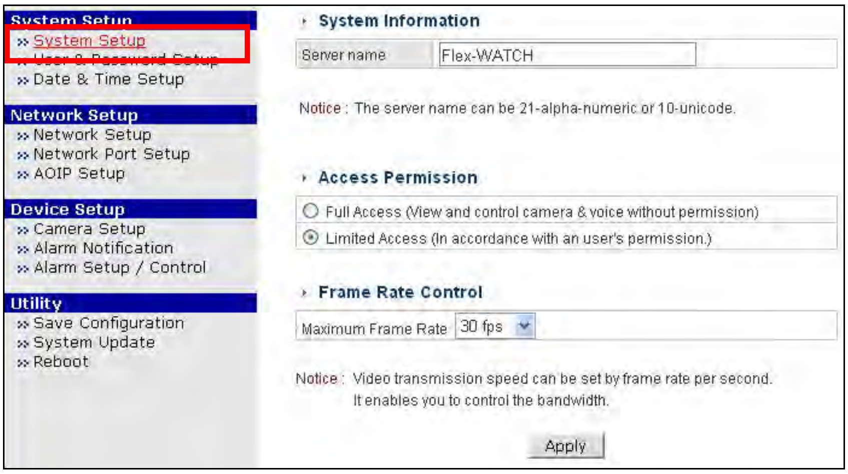


7. System Setup Menu

System setup menu shows the detailed method of FW-1120 for system configuration.



7.1. System Setup

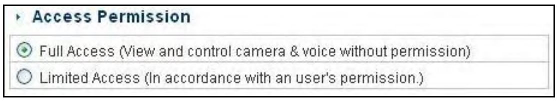


7.1.1. Server Name

Input user defined server name. The server name can be 21-alpha-numeric or 10-unicode. White character such as 'space', 'Tab' and Meta characters cannot be used for server name.

7.1.2. Access Permission

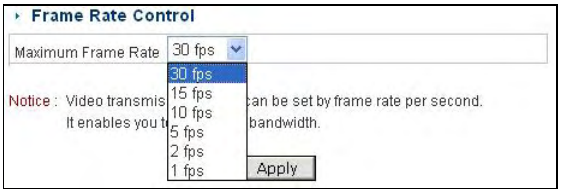
Access permission set's access permission to FlexWATCH® Server.



Full Access	View and control camera without permission.
Limited Access	Users who are registered in system can access FlexWATCH server. If this option is selected, even administrator cannot use live view.

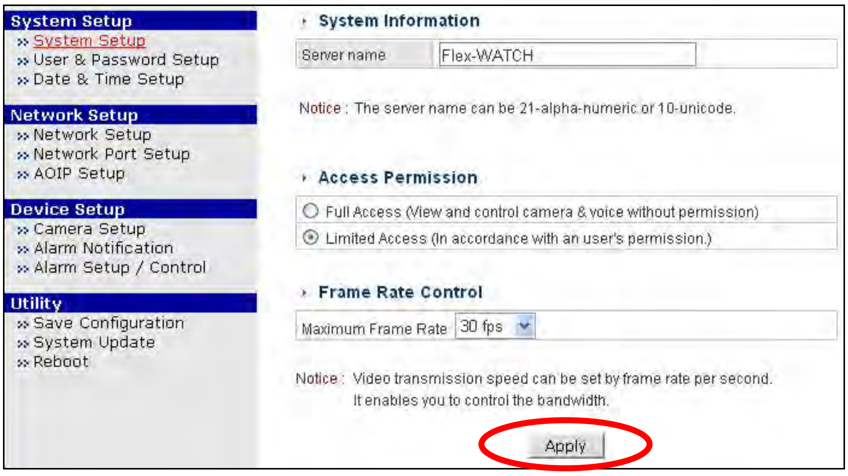
7.1.3. Frame Rate Control

Frame rate control menu enables you to control maximum video transmission speed of FW-1120. Select the values from among the 30,15,10,5,2,1 and then will be displayed as frame selected.



7.1.4. Apply System Setup

After configuration of access permission and frame rate control, press "Apply" button on the bottom to apply selected configuration of FW-1120.



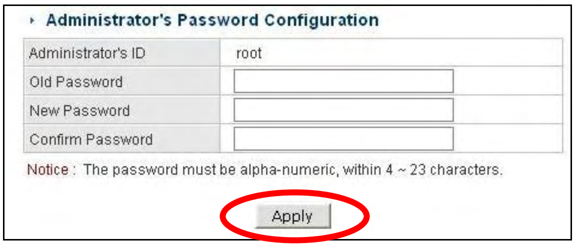
7.2. User & Password Setup

User & password menu enables you to edit the password of administrator's password. You may also add, edit, and delete user in this menu.



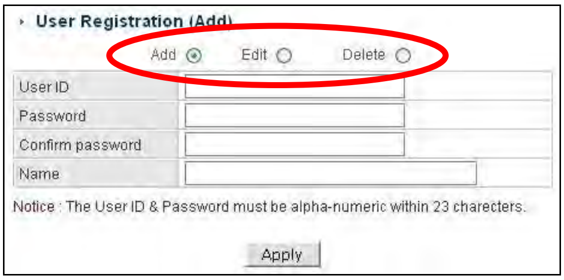
7.2.1. Administrator Password Configuration

To edit password of administrator on FW-1120, input present defined password as "Old Password", input new user defined password as "New Password", and "Confirm Password". Press "Apply" button after input of passwords. "New Password" and "Confirm Password" must match to change password.



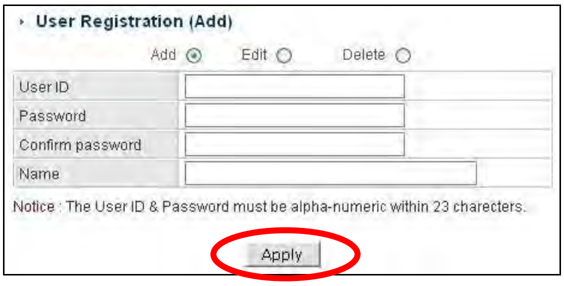
7.2.2. User Registration

User registration menu enables to register general users to FW-1120. Add, Edit, and delete can be selected from radio buttons shown as picture below.



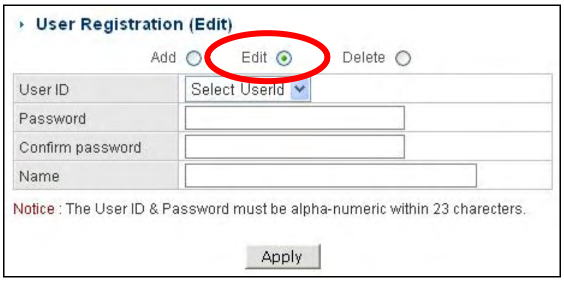
A) User Add (Add)

User adds menu enables to create and add users. You can set ID, Password, and user name. After input of "User ID", "Password", "Confirm password", and "Name", click "Apply" button to add user.

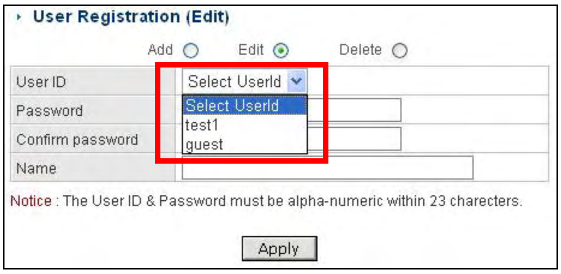


B) User Edit (Edit)

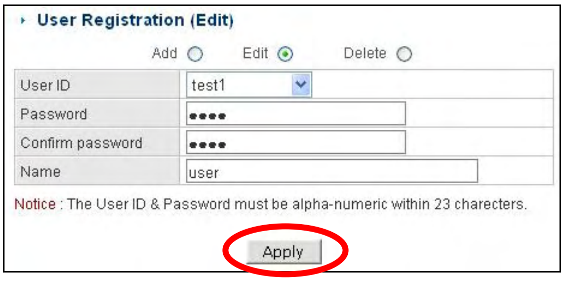
This menu enables to edit user password and "Name" Select "Edit" from the top.



Click User ID combo box and select "Select UserId".

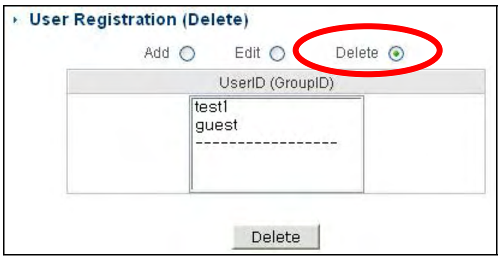


After edit, click "Apply" to apply changes.

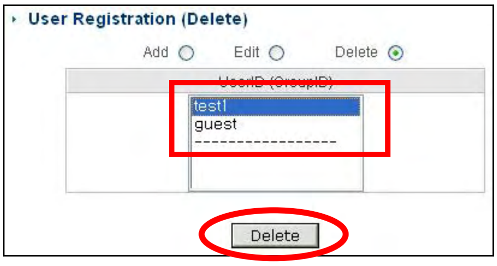


C) User Delete (Delete)

This menu enables to delete registered users. Select "Delete" from the top.



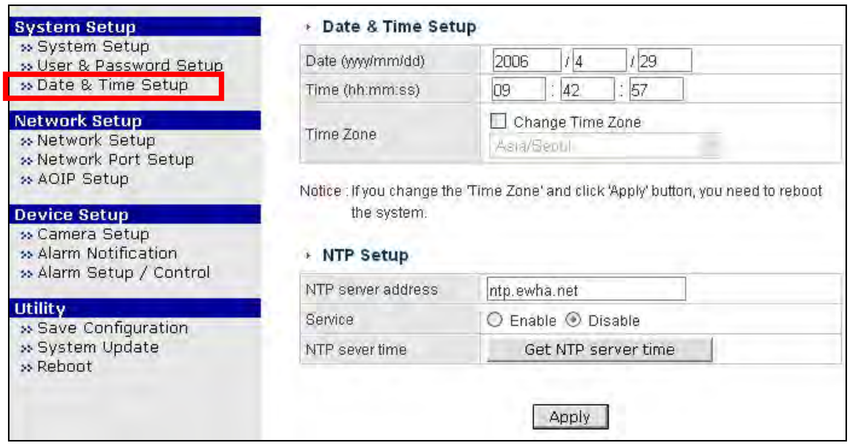
Select user ID on the registered user list and click "Delete" button.


User Registration (Delete)
Add
Edit
Delete
test1
guest

Delete

7.3. Date & Time Setup

Date & time menu enables you to set date, time, time zone, and NTP configuration.



7.3.1. Date & Time Configuration

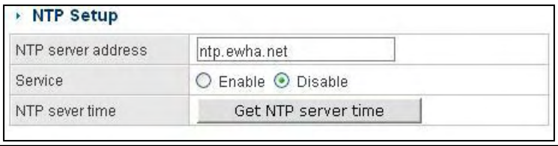
Date & time configuration menu enables to set internal date/time of FW-1120 item descriptions are as below.

Date (yyyy/mm/dd)	Display present date (Year / Month / Day)
Time (hh:mm:ss)	Display present time (Hour / Min / Sec). (24 hour mode)
Time Zone	Display local time zone.

Date and time on screen is a temporary time displayed on "Date & Time Setup" menu. This may have differences with present time of FW-1120.

7.3.2. NTP Setup

NTP setup menu enables to synchronize time of FW-1120 with time from internet time server once every 24 hours periodically.



NTP Server	Present defined NTP server
Service	Enable or disable to synchronize time of FW-1120 and time from NTP Server once every 24 hours periodically. (Once every 24 hours after boot, get NTP server time.)
NTP server time	If click "Get NTP server time" button time will synchronize with

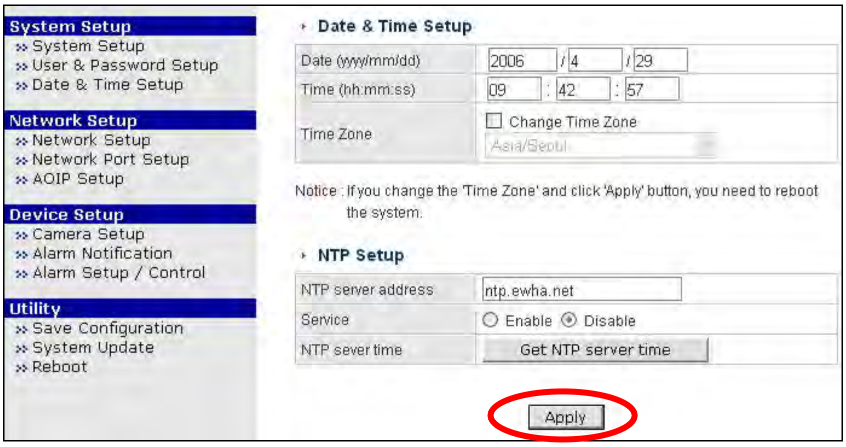
	present UTP time from defined NTP server immediately even though service status is disabled. Time zone will be changed to proper local time. To reduce error range by network transmission delay, select closest NTP server from where FW-1120 is installed.

*** NTP (Network Time Protocol) Server :** A server that provide precise date and time information through Internet.

To use NTP server, FW-1120 must be connected through Internet to Server

7.3.3. Apply Date & Time configuration and NTP setup

After configuration of time and NTP setup of FW-1120, click "Apply" button.



7.3.4. FlexWATCH® TIME

Generally, most of all O/S should set internal clock once after booting and Linux is same as other O/S. There are two ways to receive present time for O/S. The 1st way is using RTC inside of system and the 2nd way is using timeserver through network.

Internal RTC clock have its own error range. In time-to-time, internal RTC will have time differences and error range will be enlarged. Even though you set the clock precisely. Time differences will happen and error range will be enlarged. Using timeserver to get present time will have some delay due to network latency. Getting the time from the time server will be more precise and has more advantages. FlexWATCH® can be used in network environment where access to time server is not possible. FlexWATCH® provides both ways to get present time.

Daylight Saving

FlexWATCH® supports Daylight Savings (Summer time). Different time zones or conditions can be selected from Date & Time Configuration. If FlexWATCH® is under daylight savings region, applicable time zone will be defined and be applied. There are two ways of knowing the time of the FlexWATCH®. 1st is through FlexWATCH® web page, 2nd is login to HyperTerminal and use 'date' command, displayed time will be local time where daylight savings is applied. Input time zone information to FlexWATCH® precisely.

UTC and Local Time

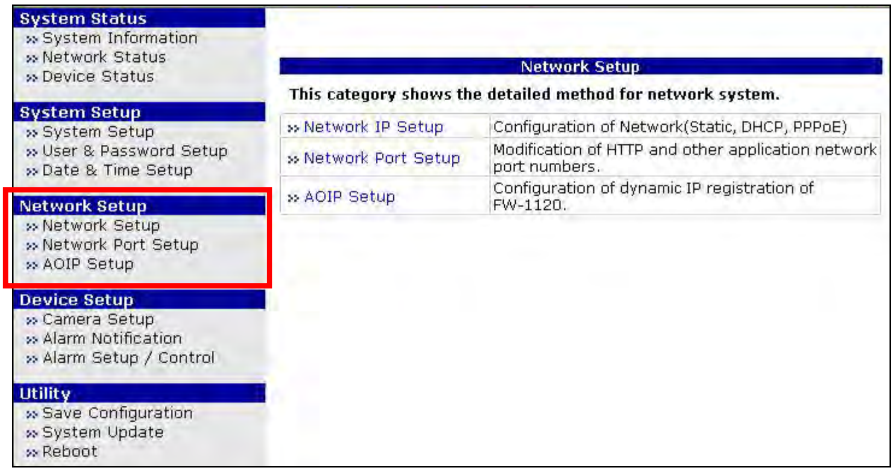
UTC means Universal Time and local time means local area time. Linux internal clock will express as UTC. Which will be displayed as local time to users, exchanging local time through time zone. FlexWATCH® uses Linux Internal clock, which is UTC and displayed time for user is local time.

NTP

Time from NTP is UTC. System will exchange this UTC time to local time through own its local time zone. NTP Server doesn't need to place in local region. But time differences can be happened when you use NTP server located in far from your country.

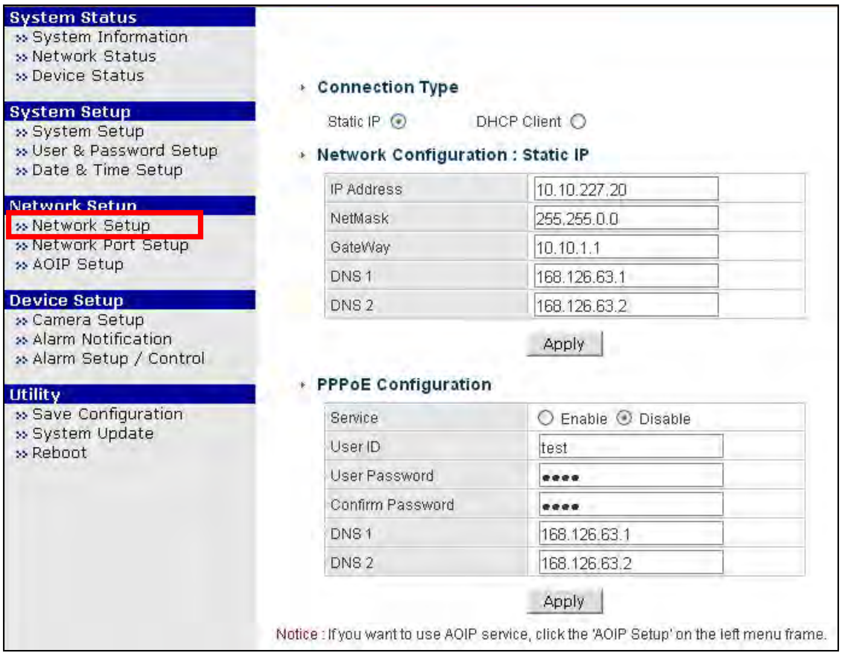
8. Network Setup

Network setup menu enables to setup whole network configuration of FW-1120.



8.1. Network Setup

Network configuration of FW-1120. Assign IP address, Net Mask, Gateway, DNS1 and DNS2, following network environment where FW-1120 is installed. You may also setup PPPoE configuration, if FlexWATCH® is connected to ADSL modem directly.



8.1.1. IP Configuration on FW-1120

A) Static IP: Select only if you can get static IP address from network where FW-1120 is installed. In this case, if assigned IP address is private IP address, direct access to FlexWATCH® is possible in intranet and access through dynamic IP function to FlexWATCH is possible in extranet. If assigned IP address is public IP address, you can access to FlexWATCH® without dynamic IP function directly.

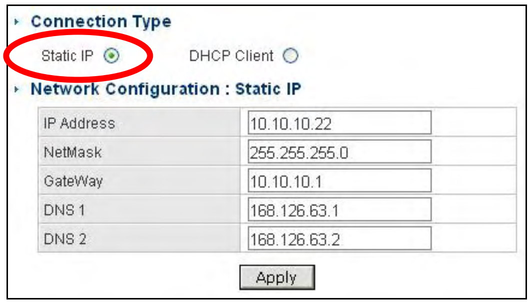
B) DHCP Client: If FW-1120 is located in network which have DHCP server or ISP provider support DHCP Server, DHCP client can be selected. In example almost ISP service (Cable modem, ADSL, VDSL) support DHCP service. Select DHCP client for auto IP assignment from DHCP server.

C) PPPoE: If ADSL modem is connected to FW-1120 directly, PPPoE can be selected. In this case, ID and Password from ISP is required to login.

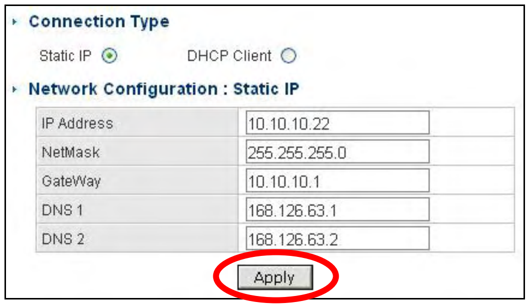
If Static IP or DHCP Client is selected, PPPoE can be set seperately.

8.1.2. Assign by Static IP

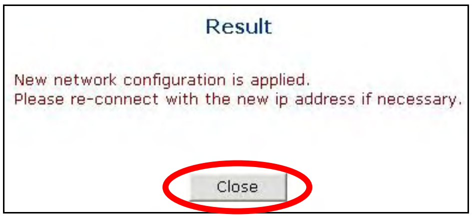
Select "Static IP" and input IP Address, NetMask, Gateway, DNS.



After input, click "Apply" button to apply settings to FW-1120.



When result message pop-up, click "Close" to close web browsers that FW-1120 is connected.



Please wait for an about 1 minute, and you can access FlexWATCH® via web browser with assigned IP address.

8.1.3. Assign by DHCP Client

You can use DHCP client when network where FW-1120 is installed, have DHCP server. Select DHCP Client and input DNS information.



After input click "Apply" button.

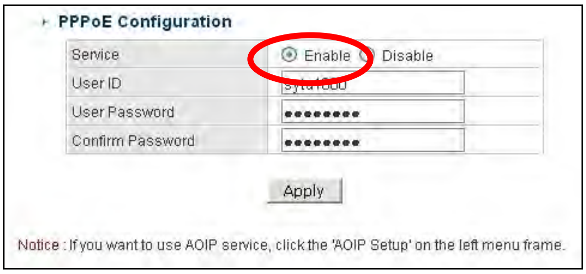


When result message is pop-up, click "Close" to close web browsers that FW-1120 is connected.

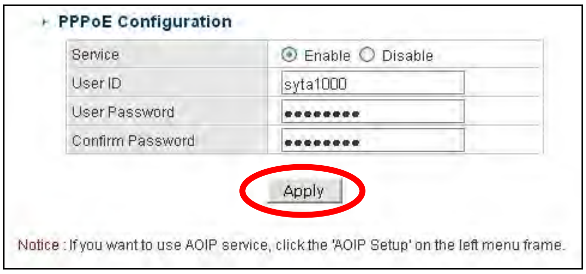
Approximately 1 minute is needed to IP assignment. If you use DHCP Client, access with previous IP address would may not possible. So check assigned IP address by using FlexWATCH Explorer, you can access FlexWATCH® by newly assigned IP address.

8.1.4. Assign by PPPoE

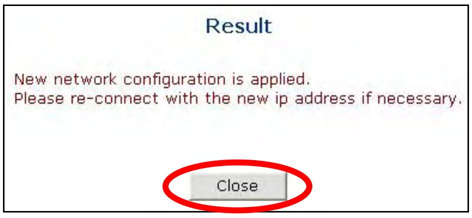
PPPoE can be used If FW-1120 is connected to ADSL modem directly and protocol from ISP is PPPoE. For using PPPoE, select "Enable" as below and input ID and Password from ISP.



After Input, click "Apply" button.



When result message pop-up, click "Close" to close web browsers, which FW-1120 is connected. PPPoE network configuration is now applied.



Static IP/DHCP IP will not changed if PPPoE is selected.

8.2. Network Port Setup

Set port numbers when FW-1120 is communicated via TCP/IP protocol.



8.2.1. Setup HTTP port

HTTP port is a port where FlexWATCH® is accessed in Web browser. This port may be changed as user defined. Default port is 80 and maximum selective port is 65535. (It must be different with other port number.)



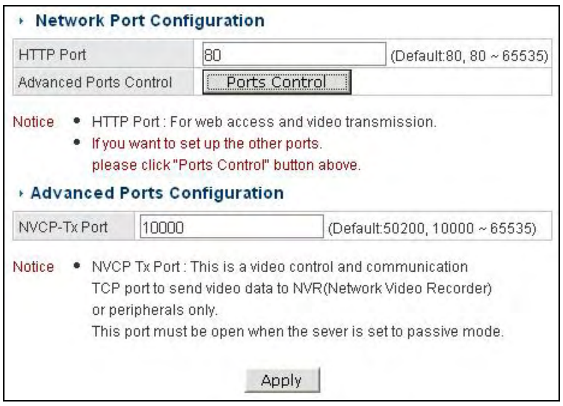
** If you change number of HTTP Port, HTTP port number must be included to the end of URL on web browser. Example, if IP address of FW-1120 is "192.168.1.100" and HTTP Port is 8080,you should input URL as follows :* *http://192.168.1.100:8080*

8.2.2. Advanced Ports Control Setup

NVCP-Tx and VDCP port can be set by advanced ports control. For ports edit, click "Ports Control" button as below.



Advanced Ports configuration menu will be shown as below. You may set NVCP-Tx and VDCP port.



8.2.3. NVCP-Tx (Network Video Control Protocol) Port

A) Port Number is used as transfers of the video data from FW-1120 to other FlexWATCH® product

B) Default value is 50200 and changeable within 10000 and 65535 range. (This must be different with other port number.)

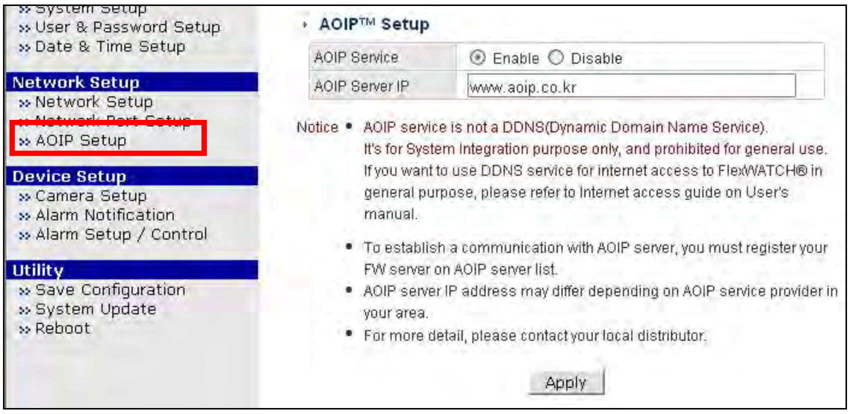
C) NVCP-Tx port is used to receive video data of FW-1120 from the other FlexWATCH® products (as NVR) on network

8.3. AOIP Setup

Notice : AOIP service is not a DDNS(Dynamic Domain Name Service).
It's for System Integration purpose only, and prohibited for general use.

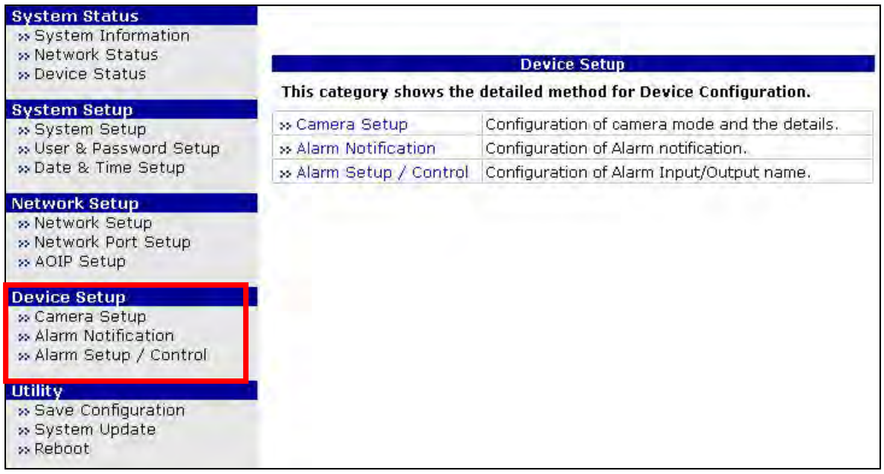
If you want to use DDNS service on Internet access of FlexWATCH® in general purposes, please refer to Internet access guide on this manual.

AOIP® Server has functions to access FlexWATCH® when IP address type is dynamic IP. In this menu, you can decide enable of AOIP® service. If service is enabled, FW-1120 report its dynamic IP and port to AOIP® server. Input AOIP server address and select "Enable" to use AOIP service. FW-1120 must be registered to AOIP® server.



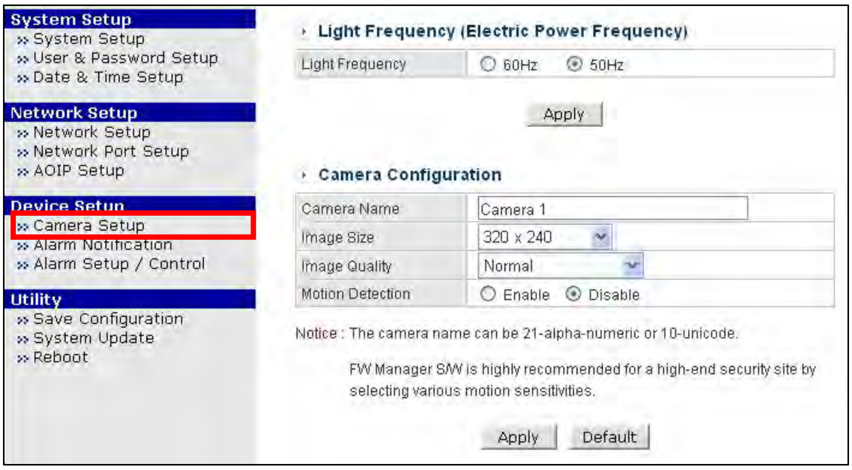
9. Device Setup

Device setup menu is used on configuration of internal camera. DI and DO of FW-1120.



9.1. Camera Setup

Users can set image size, quality, and motion of FW-1120.



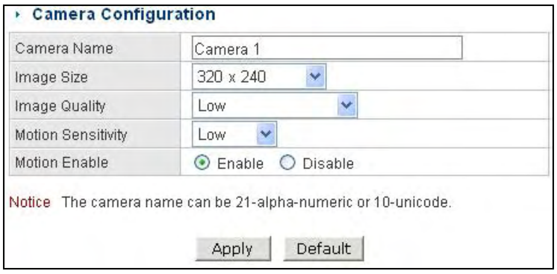
9.1.1. Light Frequency Setup

FW-1120's built-in camera use CMOS sensor. Almost CCD/CMOS cameras can have stripe shape of video noises by power frequency of light. This symptom occurs when level of brightness is changed by power frequency. (Cases of lamp not using electronic stabilizer or glow lamp) In Light Frequency menu from the above, you may select the Light frequency to lower the level of noise. Max transfer frame per second (fps) is electronic power frequency/2. You may select light frequency where FW-1120 is installed.



9.1.2. Camera Configuration

In Camera Config menu, users may setup camera name, image size, quality, and motion configuration of FW-1120



A) Camera Name: Set internal camera name.

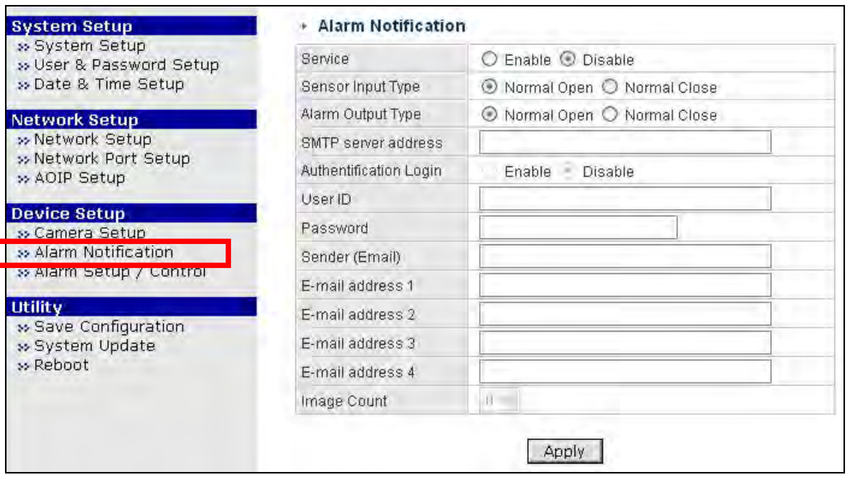
B) Image Size: Set size of image. Size of image has 3 levels : 640x480, 320x240, and 160x120.

C) Image Quality: Set image quality. Quality of image has 6 levels and best quality level is "Low Compression"

D) Motion Enable: Select motion detection function as enabled or disabled.

9.2. Alarm Notification

Alarm Notification menu has e-mail alert function when sensor receives the signal. Sensor is connected to DI of FW-1120.

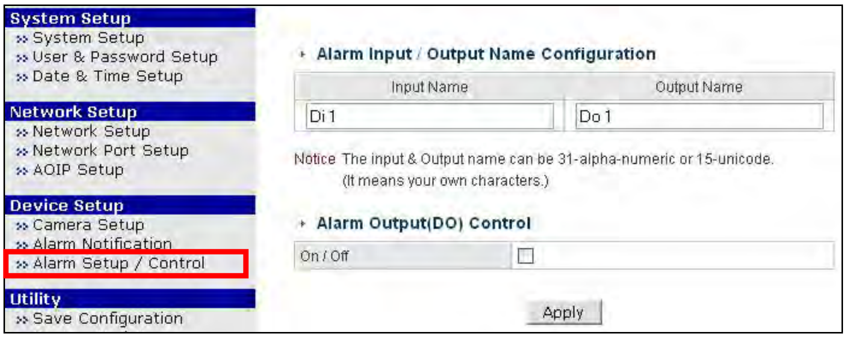


Also in this menu, user may set DO activation when external device is connected to DO.

Service	Select Enable or Disable E-mail send function by input of DI
Sensor Input Type	Setup sensor operation method for sensor connected DI
Alarm Output Type	Setup device operation method for alarm connected DO
SMTP server address	Input SMTP server address for send e-mail by DI input. Input mail server where network is connected to FW-1120.
Authentication Login	SMTP server may require authentication to send e-mail. In this case select "Enable" and input ID and Password from network service provider.
User ID	Input user ID for authentication for SMTP server.
Password	Input password for authentication for SMTP server.
Sender (Email)	To send e-mail, sender e-mail is required. Input e-mail address of administrator who can recognize FW-1120.
E-mail address 1 E-mail address 2 E-mail address 3 E-mail address 4	Input e-mail address of receiver.
Image Count	Select number(0~5) of attached image to e-mail from FW-1120.

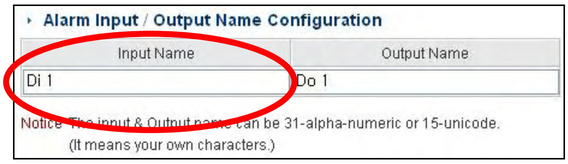
9.3. Alarm Setup / Control

In Alarm Setup / Control menu, Users may set name of DI/DO of FW-1120 and control alarm output (DO) directly.



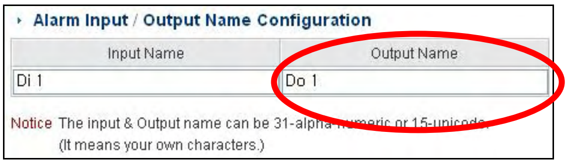
9.3.1. Set DI name

DI name can be changed for easy identification.



9.3.2. Set DO name

DO name can be changed for easy identification.



9.4. Alarm Output (DO) control

Alarm Output device connected DO can be controlled manually.



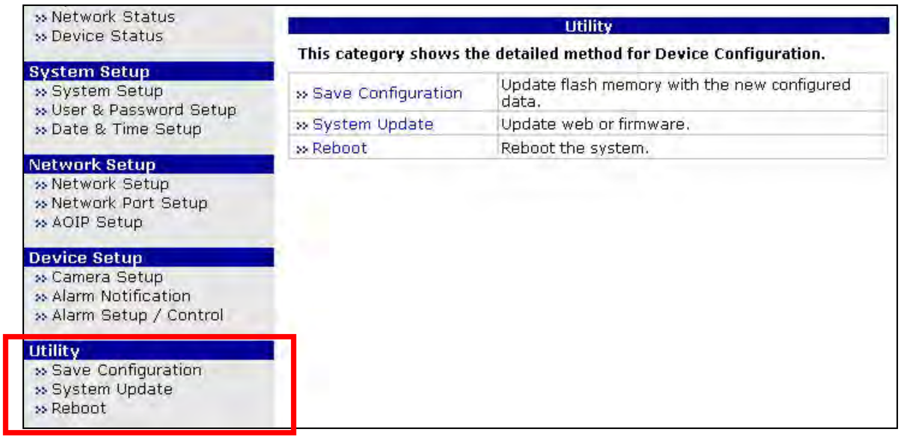
9.5. Apply changes

Click "Apply" button to apply changes name of DI/DO and control DO operation manually.



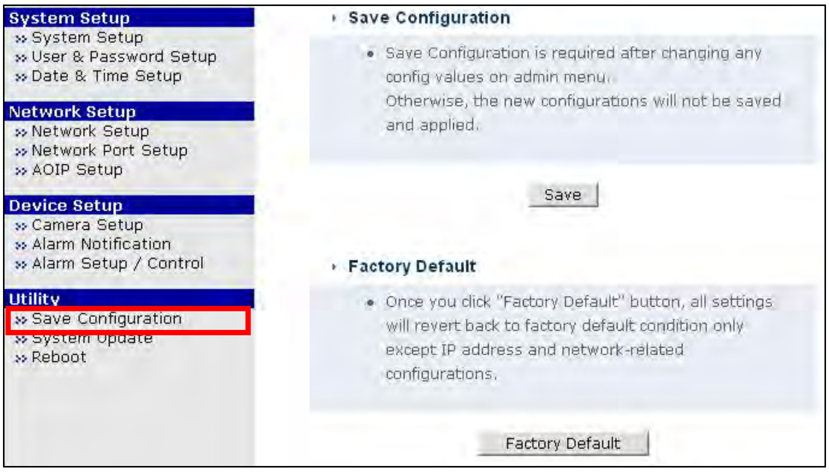
10. Utility

In Utility menu, Users may save configuration, system upgrade, and reboot.



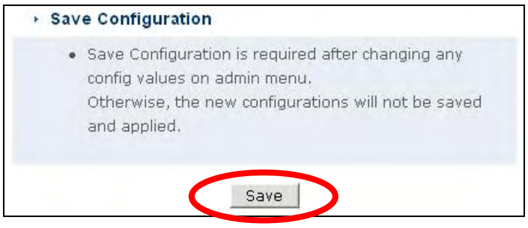
10.1. Save Configuration

Save Configuration menu enable all configuration of FW-1120 to be saved on flash memory. If configuration is changed, save configuration is highly recommended to save information's to flash memory.



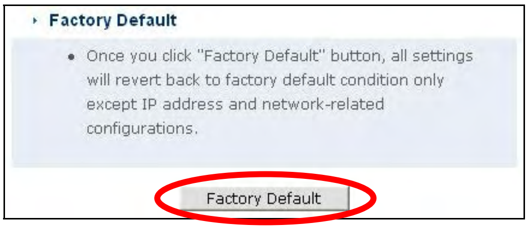
10.1.1. Save all configuration

Save all configuration of FW-1120 to flash memory.



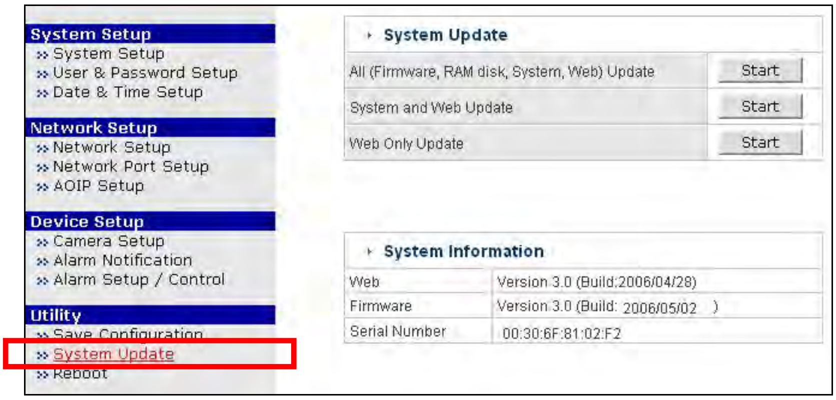
10.1.2. Revert back to factory default condition of FW-1120

Once you click "Factory Default" button, all settings of FW-1120 will revert back to factory default condition, except IP address and network-related configurations.

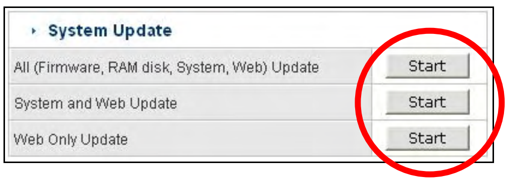


10.2. System Update

System Update is used for updates of the firmware on FW-1120. Also firmware version of FW-1120 is displayed.



FW-1120 has 4 parts of firmware. Firmwares are called 'kernel image', 'RAM disk image', 'System image' and 'Web image'. Users may update firmware partially. System update is divided as complete update and partial update.



For system update, users must have new firmware in PC. Access FW-1120 by web browser on user PC, go to admin > utility > system update menu and click "start" button to start firmware update. After completion of update, FW-1120 must be rebooted for updated firmware to apply.

*** You can download latest firmware from "Downloads" menu from Seyeon Tech website. (www.flexwatch.com)**

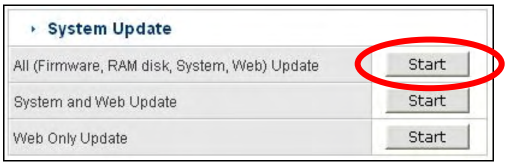
Firmware file name of FW-1120

Kernel Image	a_ker_ep
RAM Disk Image	a_rfs_ep.gz
System Image	a_sys_ep.tar.gz
Web page Image	a_web_ep.tar.gz

10.2.1. Complete (Kernel, RAM disk, System, Web) Update

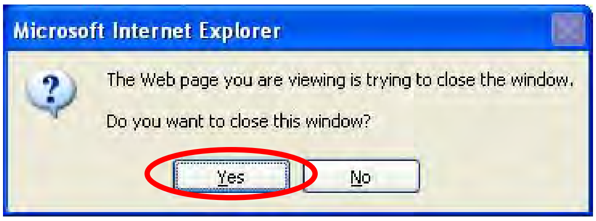
Complete Update of Firmware on FW-1120.

A) Select All (Firmware, RAM disk, System, Web) Update and Click "Start" button; update screen will pop up as below. If you select "Cancel", update will be stopped and if you select "OK", update will proceed to next step.

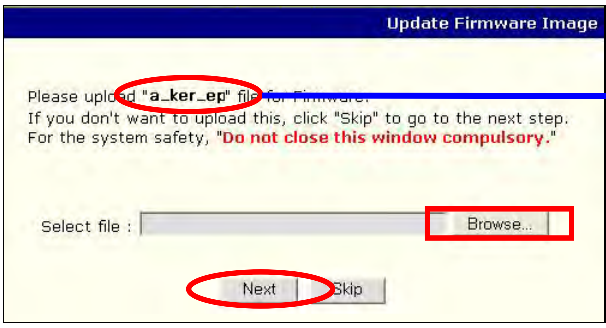




B) If you click "OK" button, below message will pop up. Click "OK" button to close webpage.



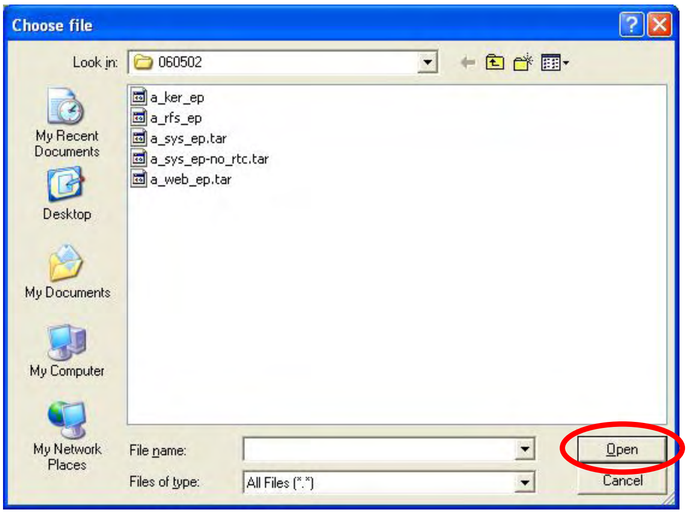
C) First, window locations of firmware image will appear. Click "Browse" button to search "a_ker_ep" file in PC, find saved "a_ker_ep" file and click "OK" button, click "Next" button, and update will be executed.



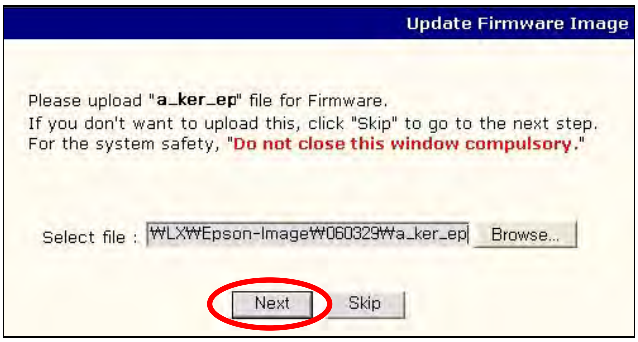
Please find "a_ker_ep" file for upload. Click "Browse" button and click "Next"

If popup blocker is installed in PC, above window may not be able to appear. So please disable popup blocker for firmware update.

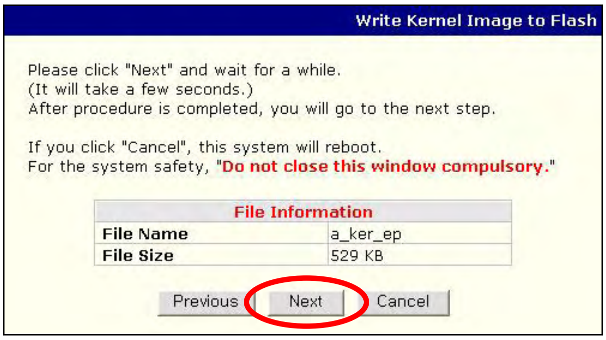
D) Click "Browse" button, search and locate the latest kernel image in PC. Click "a_ker_ep" file and click "Open".



E) Go on to the next step, click "Next" button. If "Skip" button is pressed, Firmware Image will not be updated and go on to the next step.



F) You can check file name and size on next window.



If you click "Previous" button, it will be back to step ***B).*** If you click "Next" button update for specified program will be executed and will go on to the next step. If you click "Cancel" button, update will be canceled.

G) Next step is update RAM Disk image procedure.



H) Rest procedure is as same as step ***C)*** to ***F)***.

I) Next step is update system image and web page and it also same as step ***C)*** to ***F)***.

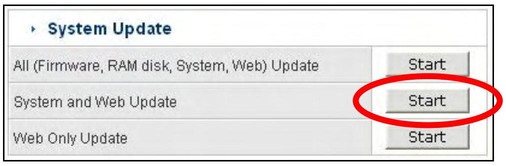
J) After all update steps are completed, user must reboot the system. Click "Reboot" button to system reboot and wait for about 1~2 minutes and access system by web browser.



10.2.2. System and Web Update

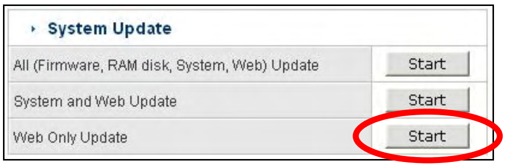
This procedure is similar with all update.

Only system image and web image will be updated.



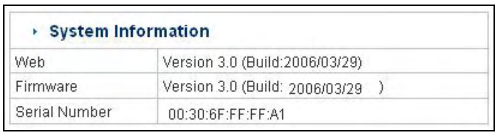
10.2.3. Web Update

This procedure is similar with all update. Only web image will be updated.



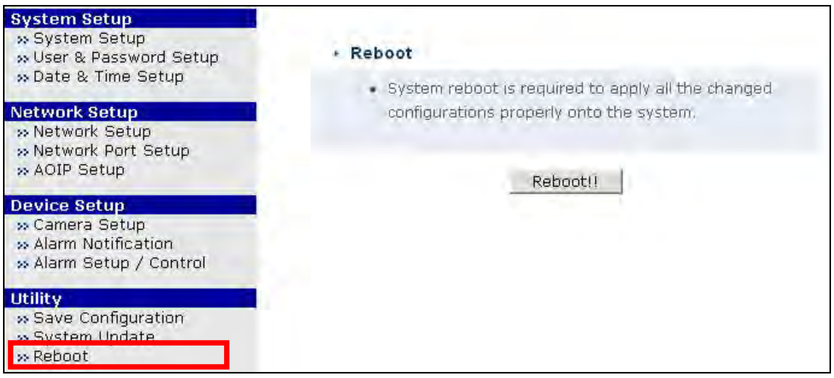
10.2.4. System Information

Firmware version and Mac address of LAN will be appeared.



10.3. Reboot

Reboot FW-1120



Click "Reboot!!" to reboot FW-1120.

Notice

- The materials in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Seyeon Tech assumes no liability resulting from errors or omissions in this document, or from the use of the information contained herein.
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URL : http://www.seyeon.co.kr
http://www.flexwatch.com

Warning

To prevent risk of electric shock, **Do not** remove system-case. No user serviceable parts inside. Any repair or modification for the product will be allowed to qualified service personal only.

Do not expose this appliance to water or moisture.

Do not install this product in Hazardous areas where highly combustible or explosive products are stored or used.

Important Information

• Before installation, please read and observe all instructions and warnings contained in this manual. Retain this manual with the original receipt for future reference and warranty.

• If any items are missing from the package when you open the box, please DO NOT install or OPERATRE FlexWATCH™ server. Contact the local Dealer or Distributor.

• Please record following information **for technical support and the track record** in case of any theft or loss. Serial Number can be found underside of FlexWATCH™ server

Product Model : ______________________________

Purchase Date : ______________________________

Serial Number : ______________________________